THE REPORT
OF THE NOVA SCOTIA ROYAL COMMISSION ON
HEALTH CARE

Summary

December 1989

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The Complete Report of
The Nova Scotia Royal Commission on Health Care
consists of the following:

- **Summary of the Report**
- **Report of The Nova Scotia Royal Commission on Health Care: Towards a New Strategy**
- **Research Studies, Volumes I, II & III**

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THE NOVA SCOTIA
ROYAL COMMISSION ON
HEALTH CARE

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Commissioner

George L. White LL.B.
Secretary and Legal Counsel

December 8, 1989

The Honourable Lloyd R. Crouse, P.C.
Lieutenant Governor of Nova Scotia

Sir,

Pursuant to the instructions given to us by Order-in-Council of the twenty-fifth day of August, 1987, we the undersigned are pleased to transmit herewith the Report of the Royal Commission on Health Care.

It is our hope that this Report will provide the people of Nova Scotia with a strategy to manage and enhance their health care resources in the years to come.

We have the honour to be your obedient servants.

J. Camille Gallant
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Chairman

Sharon Marshall
Sharon Marshall
Commissioner

+ G. Russell Hatton
The Right Reverend
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SUMMARY

Table of Contents

PREFACE 7

TOWARDS A NEW STRATEGY 9

1. Health Policies Oriented to Healthy Outcomes 10
2. Participation of Citizens 11
3. Decentralization and Regionalization 12
4. Accountability 13
5. Matching Resources to Local Health Needs 14

The Next Steps 15

IMPERATIVES FOR CHANGE: THE NOVA SCOTIA REALITY 17

1. Provincial Health Care Expenditure Patterns 17
2. Impacts of Health Expenditure on the Provincial Economy 19
3. How the Health Care Budget is Spent 20
4. Economic Environment 28
5. Federal-Provincial Funding 30
6. Health Status 31
7. Demographic and Societal Changes 33
8. The Need for Change 34

A NEW PLANNING DYNAMIC 35

1. Comprehensive Health Policy 36
2. Health Council 36
3. The Ministry of Health 38
4. Regional Health Authorities 41
5. Intersectoral Coordination 43
6. Inter-Provincial Coordination 44
7. Health Faculties - Dalhousie University 45

HEALTH PROFESSIONS 46

1. Nurses 46
2. Physicians 49
3. Associate Health Professionals 56

REVITALIZED SERVICES 58

1. Community Health Programmes 59
2. Coordinated Home Care 60
3. Institutions 61
4. Further Related Services 62
5. Mental Health Services 64
6. Drug and Alcohol Rehabilitation Programmes 65
7. Pharmacare Programme 66
8. Ambulance Services 67
9. Health Care Technology 68

FINANCING THE HEALTH CARE SYSTEM 70

1. Financial Management 73
2. A More Equitable Funding Structure 74
3. Institutions 75
4. Education of Health Care Users and Providers on Appropriate Utilization 78

CONCLUSION 80

RECOMMENDATIONS 83

PREFACE

On August 25, 1987, the Nova Scotia Royal Commission on Health Care was established by Order-in-Council. The Royal Commission was directed to undertake a comprehensive review of the health care system, including issues of cost and efficiency. The Royal Commission divided its activities into three streams: **Public Hearings**, **Research**, and **Consultations**.

The Royal Commission began by holding **Public Hearings** throughout Nova Scotia between April and July, 1988. These hearings were synthesized into a summary, **Issues and Concerns**, published in October, 1988.

The **Research Phase** consisted of three broad categories of inquiry:

- Economic, Epidemiological, and Demographic Information;
- Health Services Administration, and
- Health Policy and Planning.

Research studies prepared for the Royal Commission by consultants are published in three volumes as the **Research Studies of the Nova Scotia Royal Commission on Health Care.**

An extensive series of **Consultations** undertaken by the Royal Commission formed the third phase of its work. The Commissioners invited health policy experts to participate in their seminars, travelled to other provinces, the United States and Europe, and attended a number of major health policy conferences. The Royal

Commission met with members of both past and present commissions on health care in Canada to compare views on health care trends across the country. The opinions and reactions of representatives from the health sector to issues and options raised by the Commission's research formed a significant part of the consultative process.

The Report is the product of an exhaustive analysis of the Nova Scotia health care system undertaken by the Royal Commission. It is the Royal Commission's belief that the Report reflects an important step in the evolution of our health care system.

TOWARDS A NEW HEALTH STRATEGY

The Nova Scotia Royal Commission on Health Care was appointed to inquire into, and make recommendations to the Governor in Council with respect to, health care. While Nova Scotians are generally satisfied with their health care system, health spending constitutes the single largest expenditure in the provincial budget. In view of the magnitude and complexity of the health care system, the Royal Commission decided that it would not suffice to proceed with an inquiry based on a narrow perspective focusing solely on cost. Health spending must be approached as an appropriate economic investment yielding high dividends in terms of productivity and the well-being of society.

It is not possible to consider future costs of health services in the absence of a vision of what the health system should provide to Nova Scotians. The Royal Commission believes that the Province's health policy must be aimed at improving the health of Nova Scotians by allowing each individual to realize his or her full physical, mental and spiritual potential. All recommendations in the Report are directed at this emphasis on the individual as the underlying basis of a publicly-funded health system.

The Royal Commission's philosophy is founded on the following **Guiding Principles** that it contends must form the basis of a new health strategy for Nova Scotia:

GUIDING PRINCIPLES

- **health policies oriented to healthy outcomes;**
- **participation of citizens and providers of health services in the planning and management of the health system;**
- **decentralization and regionalization;**
- **accountability for the prudent use of limited resources; and**
- **matching resources to health needs.**

1. HEALTH POLICIES ORIENTED TO HEALTHY OUTCOMES

The ultimate goals of the health system are to maintain individual well-being and advance the health of society as a whole. Adopting a comprehensive approach to health policy should balance health expenditures with the demands of other social programmes which also contribute to the health status of Nova Scotians. A **Comprehensive Health Policy** must be aimed both at personal lifestyle choices as well as socio-economic and environmental factors over which individuals have little direct control.

A new health strategy must not only place more emphasis on health promotion and illness prevention, but must reorganize delivery systems to place greater reliance on non-institutional

and ambulatory models, shifting care to home and community settings. This must be based on a better understanding of precisely what the system is achieving. A new health strategy will therefore require constant analysis of the determinants of health and of the population's health status, as well as evaluations of the efficiency and effectiveness of health programmes.

Mortality and institutional morbidity rates are currently used as indicators of health status. Since much happens to individuals between "good health" and the onset of conditions requiring medical care, data concerning public health must be collected in order to identify people's needs prior to requiring medical or hospital services.

2. PARTICIPATION OF CITIZENS

The population at large shares responsibility for wise use of limited health resources. The best way to encourage people to accept a sense of stewardship of the health system is to empower them to act on health issues, both individually and collectively. The dissemination of information on health status, healthy behaviour, and the cost of health care is a key factor in allowing people to accept individual and collective responsibility for health choices. Such involvement encourages commitment, and it is this commitment of people to the continued improvement of their health and health services that is needed.

Broad-based participation will only occur when planning and decision-making occur closer to the beneficiaries of health programmes. The principle of empowerment forms the basis of decentralized decision-making and the development of regional structures for the delivery of health programmes.

3. DECENTRALIZATION AND REGIONALIZATION

A key guiding principle of the Royal Commission is the dual concept of decentralization and regionalization. **Regionalization** involves the adaptation of a network of services to the needs of a region, and **decentralization** further entails delegation of responsibility and authority to regional bodies.

The current centralized administration of the health care system inhibits meaningful local and regional participation of citizens and health care providers in the planning and management of health care resources. The Royal Commission maintains that all health programmes should be planned and managed by **Regional Health Authorities** within clear guidelines established by the provincial government. This will necessitate significant changes within the health system. Regional Health Authorities will become the principal partners with government to ensure that appropriate services are provided in each health region, taking into consideration the needs and priorities of local communities, health care providers, and agencies.

If the delegation of authority to the regions is to be successful, competent managers and extensive public input will be needed, and a commitment to these changes must be made by the government, the public, physicians and other health care provider groups.

4. ACCOUNTABILITY

An emphasis on decentralization and broad participation in planning and managing the health system necessitates a high degree of accountability from those to whom government delegates authority. The government's principal health mandate should be to provide a province-wide planning process with health goals and measurable objectives as the basis for regional accountability for managing limited provincial resources.

Information and evaluation are essential to management concerned with results. An information system must be developed to provide comparative data, analysis of operations and programmes, population characteristics, and health care needs. Timely and accurate data will permit the evaluation of local health needs, more effective central and regional planning, and monitoring of outcomes. Bringing information and evaluation results into the public forum will serve to make the health care system more accountable for its performance.

Accountability and coordination will be strengthened by providing health care professionals with opportunities to participate in planning and management. Financial incentives should be used to advance sound management practice and professional decision-making with respect to the way in which health services are offered and used.

5. MATCHING RESOURCES TO LOCAL HEALTH NEEDS

A new health strategy will strengthen the relationship between available resources and health needs of the population through changes in the delivery of health services, the deployment of health personnel, the use of technology, and the allocation of capital and financial resources.

The Royal Commission proposes changes to adjust the balance between the acute care, institutional emphasis in the system and the other components of health care. The greatest potential for advances lies in community-based services. A restructuring to promote services that embrace health promotion and the treatment of disease in acute care, long-term care, rehabilitation and palliative care is needed.

Future human resource planning must strike a new balance between physicians and other health professionals, with health needs and demographic information determining the number and mix of professionals required. Training programmes must be adapted to produce professionals who will practice in community settings as well as in institutions. Approaches to case management and multi-professional health care delivery involving doctors, nurses, and other health professionals need to be developed. The role of nurses in the delivery and management of health services must be recognized and appropriate work conditions and career structures established.

Like any other health resource, the use of technology must reflect population-based regional needs. Technological advances are creating fiscal pressures, ethical dilemmas, and questions concerning appropriate care. While information on clinical assessment can be borrowed from other jurisdictions, the economic and ethical aspects of assessments need to reflect local values and costs. Both low cost, high volume and high cost, new and emerging technologies need assessment and review.

The Royal Commission believes that the Nova Scotian health system is, as a whole, adequately funded, but that existing financial resources need to be redistributed more equitably and managed more effectively. A decentralized and rationalized process of decision-making should result in effective and efficient use of existing capital, with future capital construction and equipment acquisitions being based on demonstrated service needs, health goals, and priorities.

THE NEXT STEPS

Twenty years ago the Province of Nova Scotia joined with the federal government to provide its citizens with publicly-funded, universal access to all necessary medical and hospital services. Shortly after the introduction of Medicare, concerns began to be expressed about health care use and escalating costs. The Nova Scotia Council of Health concluded that the publicly-funded health system could be improved and costs contained to a level that the province could afford. More recently, the Nova Scotia Legislative Select Committee on Health likewise suggested that the health of Nova Scotians could be improved, and significant savings realized, by devising a strategy for the delivery of health services designed to prevent disease and promote health. Little change has been introduced into the system to divert the focus from the treatment of disease through physician and hospital services.

The challenge is to devise a New Health Strategy that maximizes the impact of health expenditures by establishing a cost-effective health system that not only treats illness, but also prevents disease and promotes well-being. Hence, the Royal Commission has given a great deal of attention to the planning processes needed to ensure equitable access to a health system that champions as well as maintains health. These recommendations should be viewed as **the next steps** in building a strategy to achieve this new health system.

IMPERATIVES FOR CHANGE: THE NOVA SCOTIA REALITY

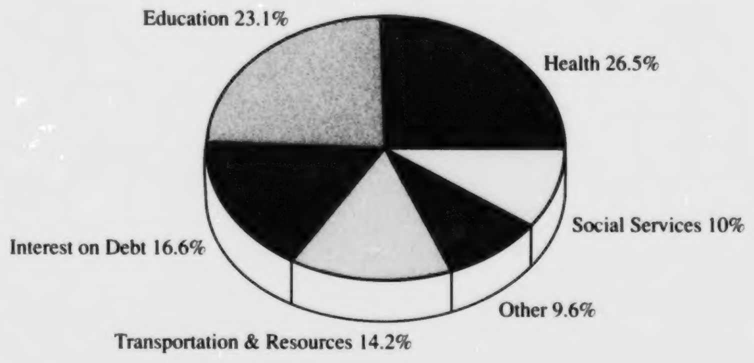
Health care policy is evolving in the context of changing political, economic, and social conditions, all of which have a continuing impact on the provincial health care system. The Royal Commission's examination of health and health care is grounded in a broad economic and social context. This section describes the province's health care expenditures and economic climate, federal-provincial fiscal arrangements, and the health of Nova Scotians as well as social and demographic trends affecting health care.

1. PROVINCIAL HEALTH CARE EXPENDITURE PATTERNS

Health care expenditures are the single largest item in the provincial government's budget. An estimated $1.1 Billion ($1,100,000,000) will be spent on health care in the 1989-1990 fiscal year. The figure below compares the estimate for health expenditures with other budgetary items.

The Department of Community Services will spend an additional $104 million on health-related programmes in 1989-90. In addition, several health-related programmes are cost-shared with municipalities. Past and present health expenditures represent a considerable proportion of the accumulated public debt and ongoing debt service charges which currently account for 16.6 per cent of total provincial spending.

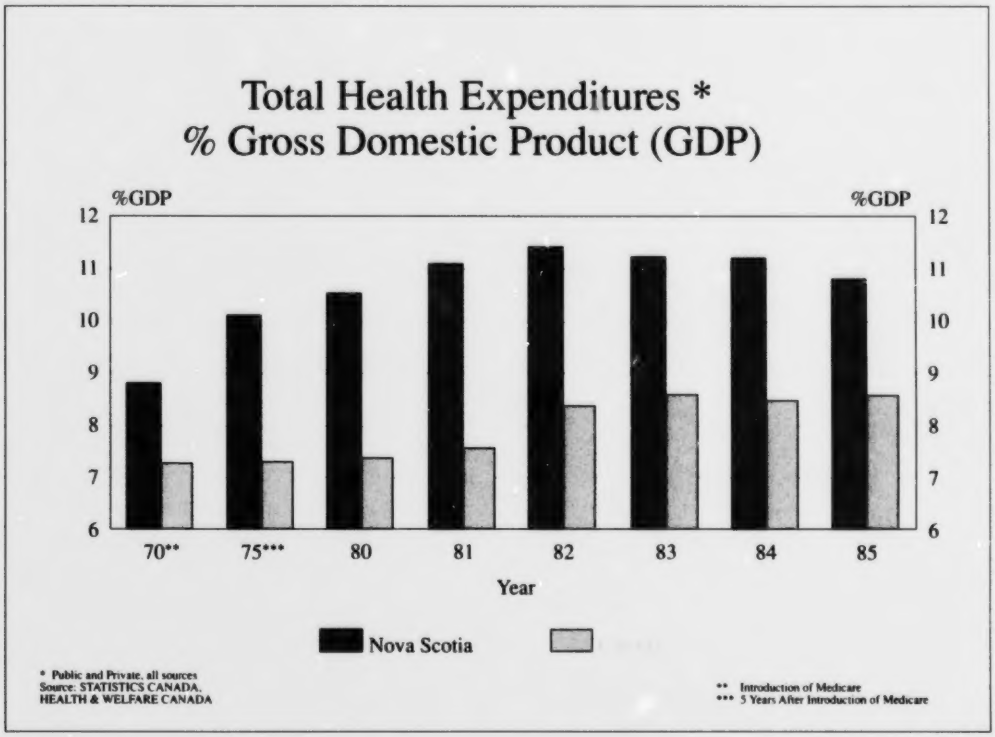
Gross Expenditures by Function
Nova Scotia 1989-90



Source: BUDGET ADDRESS
NOVA SCOTIA HOUSE OF ASSEMBLY
FOR THE FISCAL YEAR 1989-90

Since 1980 health expenditures have increased consistently at rates higher than increases in total provincial spending. Government efforts to control costs have resulted in some stabilization in health expenditures as a proportion of the total provincial budget in the last three years.

Nova Scotia has consistently ranked above the national average in terms of the percentage of gross domestic product that it spends on health care. The relatively higher proportion of gross domestic product going to health care in Nova Scotia is due, in part, to higher levels of gross domestic product in the central and western provinces and cannot be solely attributed to higher health care costs in Nova Scotia. In 1985, the most recent year for which data are available, the per capita health care costs in Nova Scotia were the highest in the Atlantic provinces at 91 per cent of the Canadian average, while per capita gross domestic product was only 72 per cent of the national average.



Total Health Expenditures *
% Gross Domestic Product (GDP)

* Public and Private, all sources
Source: STATISTICS CANADA, HEALTH & WELFARE CANADA

** Introduction of Medicare
*** 5 Years After Introduction of Medicare

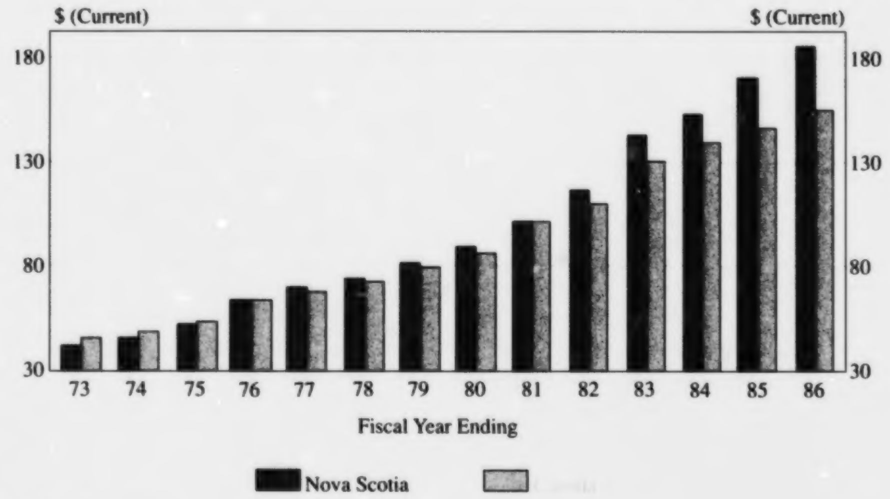
2. IMPACTS OF HEALTH EXPENDITURE ON THE PROVINCIAL ECONOMY

Government spending on health care significantly affects the provincial economy. As a result of $863 Million in direct expenditures by the Province in 1986-1987, $1.3 Billion in gross domestic product was generated. Direct personal income and induced income account for a large part of the resulting gross domestic product. In fiscal year 1986-1987, health care spending created an estimated 36,400 full-time jobs, 19,000 directly in health care and 17,400 elsewhere in the economy. These 19,000 direct jobs accounted for over 5 per cent of total provincial employment and 9 per cent of total provincial earned income. There are more jobs in the health sector, with much higher income levels, than in the primary industries of fishing, agriculture, and forestry combined. Expenditures and employment levels in the health care sector are highest in Halifax County, which accounts for 55 per cent of total spending, 56 per cent of total health related employment, 50 per cent of the province's physicians, and 35 per cent of the province's total population.

3. HOW THE HEALTH CARE BUDGET IS SPENT

Review of expenditure patterns since Medicare's introduction shows that the vast majority of health care expenditures in Nova Scotia, and in Canada generally, has been on hospital programmes, physicians' services, and prescription and non-prescription drugs.

Public spending for physicians' services has grown faster in Nova Scotia than in other provinces. The average income from all professional sources for physicians in Nova Scotia was second only to Ontario physicians for the fiscal year ending in 1986. Nova Scotia's expenditure of $183 per capita was 20 per cent above the national median in 1986. Expenditure per insured person on physicians' services in Nova Scotia has increased on average 3.4 per cent annually in real costs in the five year period of 1982 to 1987.



Expenditure Per Person on Physicians' Services, Nova Scotia and Canada

Source: HEALTH & WELFARE CANADA

Increased per capita spending on physicians' services is a result of several factors, including an increased supply of physicians, higher remuneration rates for physicians, and increasing utilization of services by the population.

Since 1970 the supply of physicians in Nova Scotia has almost doubled, exceeding the growth rate of physicians for the country as a whole. In 1970, there were 1.3 physicians (including interns and residents) per 1000 Nova Scotians. In 1987, there were 2.2 physicians per 1000. The use of physicians' services has also been increasing. Physicians' services per 1000 population have increased for all types of services, with the exception of home visits and hospital visits. Services by medical specialists show the highest increases in use, followed by those of surgical specialists and general practitioners. Areas with higher per capita general practitioner and specialist ratios have demonstrated high use of services. This illustrates increasing need for services, increasing demand and expectations of the public, or demand created by physicians themselves.

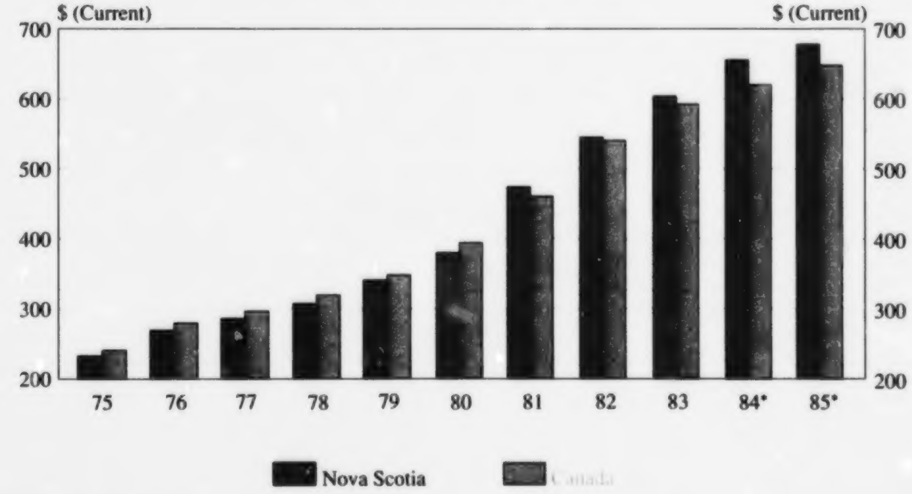
Because of expected increases in the number of physicians, whose supply is forecast to grow at rates higher than the growth of the insured population, it is reasonable to assume that services per 1000 population, and per capita expenditures on physicians' services, will continue to grow in Nova Scotia. Analysis of fee schedules and physician practice patterns has demonstrated that simply controlling the price of services cannot regulate growth in expenditures for physicians' services. Given the trends noted above, there is a need to control the factors of supply, utilization, remuneration, and distribution of physicians and their services.

The Royal Commission contends that there are too many physicians in Nova Scotia. Moreover, the distribution of services in certain areas and among certain types of medical practice was identified as a concern during the Royal Commission's Public Hearings. The Royal Commission also believes that given current levels of spending on physicians' services in Nova Scotia, action must be taken immediately to address these issues of supply and distribution.

Hospital Services

Hospital services continue to consume the majority of health resources in Nova Scotia. Since 1981, Nova Scotia's costs for hospital services have exceeded those of Canada as a whole. The national trend towards decreased expenditure on hospital services and increases on other types of institutions is not evident in this province. The segment of the Nova Scotia health budget allocated to hospital services has remained fairly stable over the past few years, at 61 per cent of the total provincial health budget. Nova Scotia's per capita costs for hospital services have exceeded those of Canada as a whole.

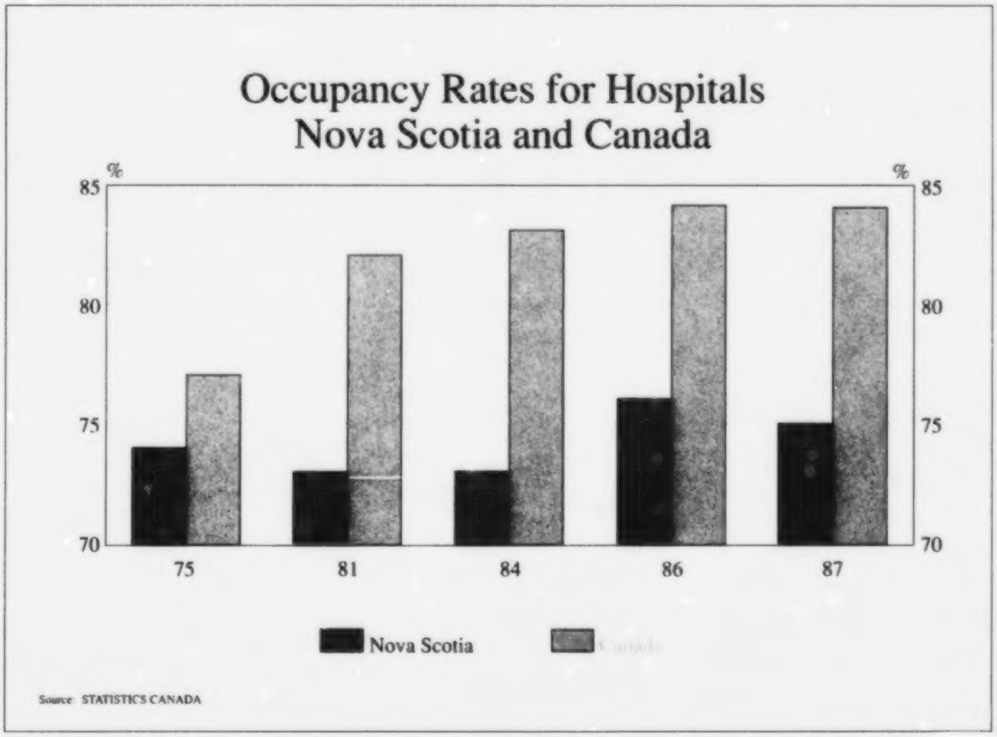
Expenditure Per Person on Hospitals
Nova Scotia and Canada



Source: HEALTH & WELFARE CANADA

* Estimate

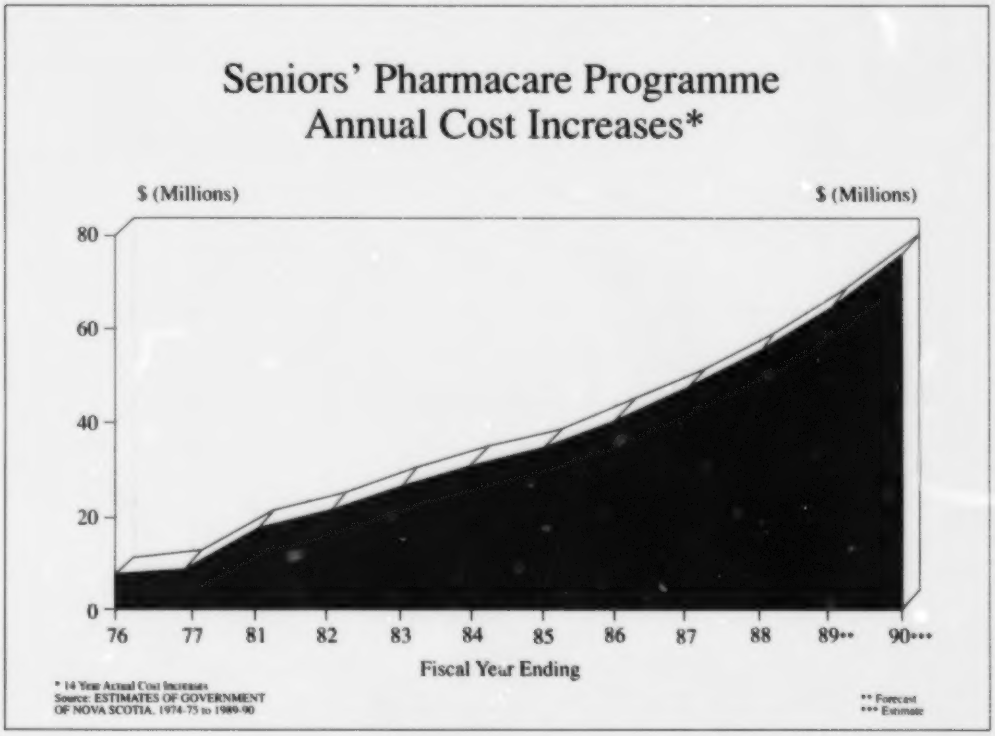
Analysis of bed to population ratios helps to explain the different hospital expenditure trends. In Nova Scotia the ratio was 6.6 per 1000 in 1986 — a figure in line with the national average of 6.7 beds per 1000, but well above the 4.5 acute care beds per 1000 population recommended by the Nova Scotia Council of Health in 1972. A second factor contributing to differences in hospital expenditure trends is the use made of hospital beds. Nova Scotia's occupancy rate of 75 per cent for general hospital beds in 1986 suggests a surplus of beds in the hospital system and an opportunity for reallocating resources to other types of services.


Occupancy Rates for Hospitals
Nova Scotia and Canada

Source: STATISTICS CANADA

Pharmacare

Pharmacare costs run at 32 per cent above the national average in Nova Scotia. The Pharmacare programme has increased on average 18 to 20 per cent annually during the past decade. The Consumer Price Index increases for that period averaged 8 per cent.



Seniors' Pharmacare Programme
Annual Cost Increases*

* 14 Year Actual Cost Increases
Source: ESTIMATES OF GOVERNMENT OF NOVA SCOTIA, 1974-75 to 1989-90

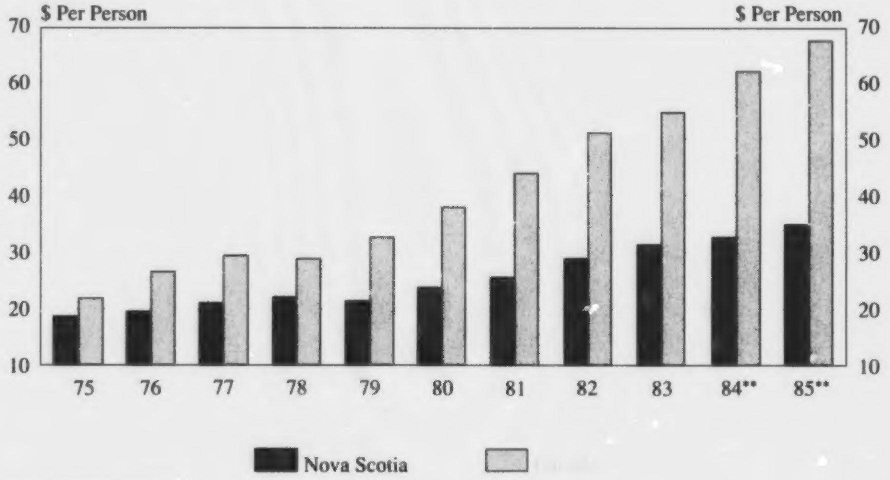
Quality of service cannot be equated with expenditure. As with many other health programmes, it is difficult to compare expenditures without understanding the differences in the way funds are being spent. More stringent cost control measures are needed at the present time to check this upward trend in Pharmacare costs. With a growing number of beneficiaries under the programme, expenditures on Pharmacare can be expected to increase unless controls are adopted.

Ambulance Services

In simple dollar terms, expenditures on the Ambulance Subsidy Programme have increased sharply since its inception, from $300,000 in 1970 to $12.5 million estimated for 1989. However, Nova Scotia's total per capita expenditure on ambulances, including private and public sources, was below the Canadian average in 1983. As with Pharmacare, it is difficult to compare expenditures due to the differences in programmes in other provinces. Given the structure of the ambulance sector in Nova Scotia, the Royal Commission believes that the present level of expenditure, estimated at $12,508,700 or $14.13 per capita for fiscal year 1989-90, is reasonable. **Nonetheless, the Royal Commission maintains that there are inefficiencies in the provision of ambulance services in this province, which, if addressed, should permit re-allocation of funds for improved standards and better quality of care.**

Community Health and Drug Dependency Programmes

There is a demonstrated need for Nova Scotia to strengthen funding for community health and drug dependency programmes. Per capita expenditures in current dollars for these programmes have increased from approximately $19 to $35 between 1975 and 1985. The average expenditure per capita in Canada has increased from approximately $21 to $65 over the same period.



Expenditure Per Person on Public Health (Including Drug Dependency Programmes)

* Total Private and Public Spending
Source: HEALTH & WELFARE CANADA

** Estimate

Community health programmes are believed to represent the greatest potential for improving the health of Nova Scotians through illness prevention, public education, and health promotion. **The Royal Commission proposes that funding for these programmes should be increased to reflect the new health strategy recommended in this Report.**

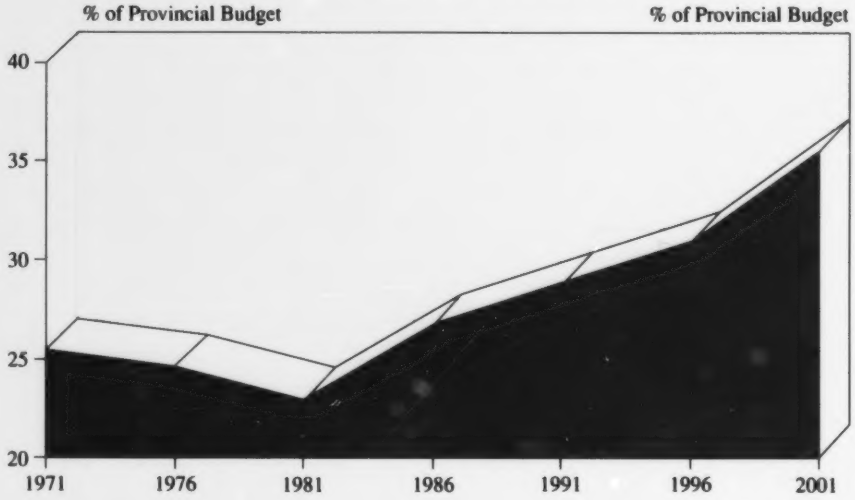
4. ECONOMIC ENVIRONMENT

Economic output, unemployment rates, inflation, and the increasing public debt will determine, to a large extent, the level of funding that can be made available for health spending. The Nova Scotia economy is expected to be characterized by steady, rather than rapid, growth.

In 1988, the unemployment rate was 10.2 per cent, down from the high that occurred in 1985. The labour force is forecast to expand at a slower rate than employment over the next fifteen years. As a result, unemployment is forecast to drop to 5.5 per cent by 2001, notwithstanding a slowing rate of economic growth.

Over the last fifteen years, inflation rates for health and social services in the provinces have exceeded the Nova Scotia Consumer Price Index with only a moderate reduction forecast. In current dollars, health expenditures are expected to grow at an annual average rate of 8.7 per cent while total provincial expenditures are projected to increase at an annual average rate of 6.6 per cent. **If current trends continue, health care spending could exceed 35 per cent of total provincial expenditures by 2001.**

If health and other social service sectors continue to consume a growing proportion of gross domestic product and government budgets, the economy will be less able to sustain these programmes. Available resources from government will be increasingly consumed by the social service sector and by the public debt, particularly in light of a forecast reduction in the province's ability to pay for these services. Nova Scotia's accumulated provincial debt is in the range of $4 Billion. Approximately 17 per cent of annual provincial expenditures are spent on debt servicing charges. Projections for a slower pace of economic growth imply a reduction in the ability of the province to pay for health care if all other factors are held constant.


Health Care as a Percentage of Total N.S. Expenditure (Projected to 2001)

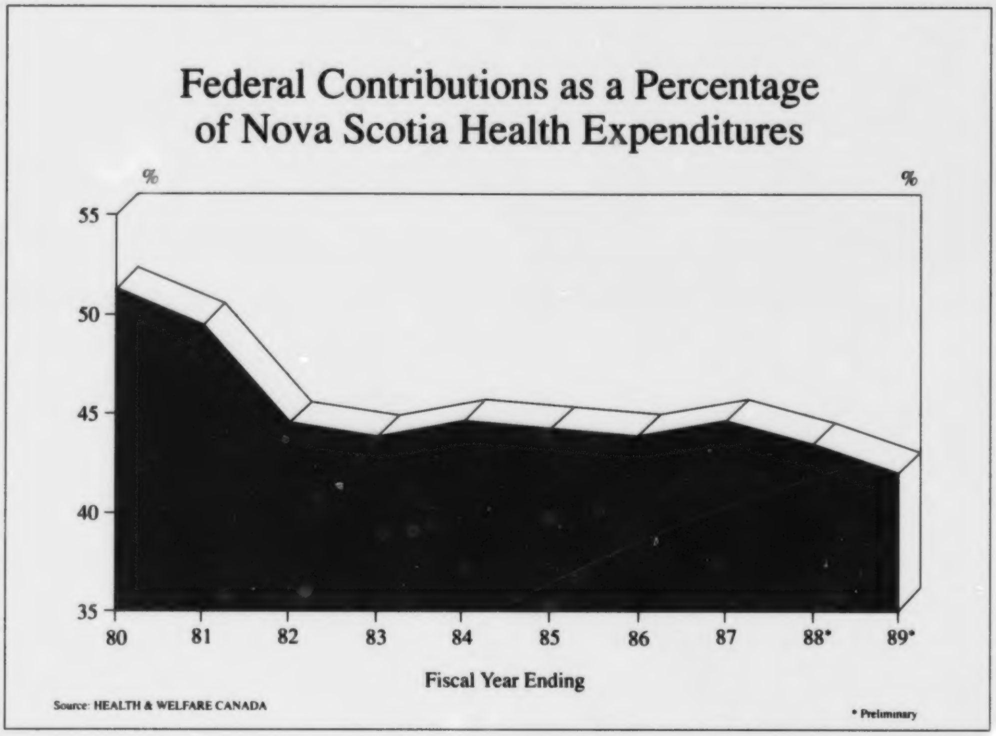
Source: STATISTICS CANADA (actual), CANMAC ECONOMICS (projections)

5. FEDERAL-PROVINCIAL FUNDING

Established Program Financing provides conditional federal contributions toward the health and post-secondary education costs of the provinces. **The federal government's contribution to health funding through Established Program Financing has fallen proportionately over the last decade in relation to provincial health care expenditures.** These payments have not kept pace with the rise in health care costs, which have increased faster than either the inflation rate or the growth of the gross national product. This has led to provinces paying a rising proportion of health care costs from their own revenue sources.

Federal contributions as a percentage of provincial health expenditures in Nova Scotia have fallen almost 10 percentage points since 1979. Health expenditures in Nova Scotia grew by 285 per cent during the same period. With the present Established Program Financing escalator, **the federal government will continue to contribute a smaller share toward total provincial health care expenditures, unless growth in health care costs can be brought down to the rate of growth of the economy.**

This situation has been further exacerbated by the unilateral decision of the federal government to alter the contribution formula and reduce federal contributions by two percentage points per year. Further reductions may be forthcoming.



Federal Contributions as a Percentage of Nova Scotia Health Expenditures

Source: HEALTH & WELFARE CANADA

* Preliminary

6. HEALTH STATUS

A shift in the definition of health has resulted in it no longer being determined by the absence of disease but by a combination of factors which provide people with beneficial living conditions. This evolving definition of health requires a better understanding of the determinants of health and the means of measuring it. Positive indicators of health must be developed and refined to establish goals for public policy that link the delivery of health care services to health outcomes.

While measurement of health status needs to be further developed and refined, **an initial overview indicates that Nova Scotians are not particularly healthy when compared to the residents of the other provinces.** In a comparative analysis of health status, Nova Scotia does not rank favourably against the other Atlantic provinces, Saskatchewan, Manitoba or the national figures. **In measurements of life expectancy, standardized death rates and premature deaths Nova Scotia ranked below the national average. The population of Atlantic Canada has a higher than average proportion of disabled persons, is at greater risk of cardiovascular disease and reports high occurrence of high blood pressure, smoking, obesity and low rates of physical activity.**

Several health studies in Nova Scotia demonstrate that health status differs regionally and between socio-economic groups in the population. Government attempts to improve the health of the population must take into account factors such as unemployment, education, and environment, which are often beyond an individual's control. These factors should be considered in the formulation of a comprehensive approach to health policy. Survey results indicate a high propensity among Nova Scotians to make lifestyle changes to reduce problems of hypertension and poor nutrition.

Government can support the population in making healthy life choices by placing greater emphasis on illness prevention and health promotion policies, and by implementing appropriate policies and programmes directed at the social, economic, and environmental causes of illness, as part of an integrated approach to health.

7. DEMOGRAPHIC AND SOCIETAL CHANGES

Demands made on the health sector are determined to a great extent by the character, structure, and expectations of the population it serves. The provision of universal health care has led to the increased use of the health care system and a widespread expectation that people are entitled to high quality health care. Trends in population growth and composition, and changes in lifestyles and attitudes, are expected to have implications for health care services, expenditures, and financing.

The proportion of elderly is increasing due to lower fertility rates, international and inter-provincial migration, and longer life expectancy. Cost projections range from an annual average increase of one to two per cent in health care expenditures attributable to the effects of population growth and ageing. Furthermore, the ageing population will likely affect the tax base of the province, as a large proportion of the population retires and contributes less to tax revenue.

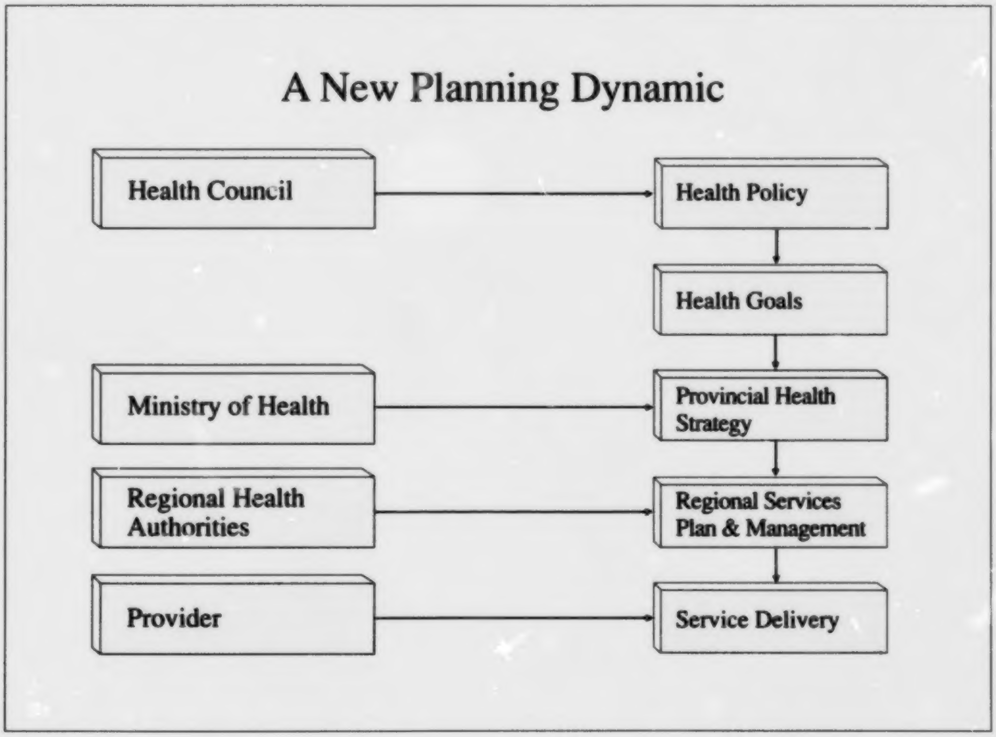
Changing social roles, attitudes, and living arrangements are also affecting the provision of support and services to both the very young and the very old. Care by family members of the dependent groups of the population may decline as the traditional family unit and the social roles of males and females change. When compared to other countries which are members of the Organization for Economic Cooperation and Development, Canada has a high rate of institutionalization of the elderly; therefore, the impact of these changes on the living arrangements for seniors will be an important factor in future planning for their service needs.

8. THE NEED FOR CHANGE

The provision of universal health care has benefited the people of Nova Scotia, but has also led to undue expectations of unlimited health care services. The Province's ability to pay for all its social services could be compromised by a forecast of slower economic growth, reduced federal contributions, and an increase in the proportion of its dependent population. The provincial fiscal situation, the health of the population, and society's expectations, all signify an urgency to develop health policies and planning processes that are responsive to the needs of Nova Scotians.

A NEW PLANNING DYNAMIC

The Royal Commission is calling for a **comprehensive approach to health policy.** In keeping with its Guiding Principles, the Royal Commission envisions a participatory and decentralized administrative structure, comprising a **Provincial Health Council**, a re-organized **Ministry of Health**, **Regional Health Authorities** and provider groups. New relationships among government and health care providers will be called for, as the figure below illustrates.


A New Planning Dynamic
Health Council
Health Policy
Health Goals
Ministry of Health
Provincial Health Strategy
Regional Health Authorities
Regional Services Plan & Management
Provider
Service Delivery

1. COMPREHENSIVE HEALTH POLICY

The Royal Commission on Health Care proposes the concept of a Comprehensive Health Policy. This is a broad-based policy framework aimed at achieving a healthier population by ensuring that all policy initiatives undertaken by the government include an assessment of their impact on the health of the population. A Comprehensive Health Policy is based on the principles of equity and participation, a multi-sectoral approach, and an ecological perspective. Furthermore, the Commission believes that all concerned must recognize that an individual's freedom to make choices for good health will be limited by economic, social, educational, and environmental factors.

2. HEALTH COUNCIL

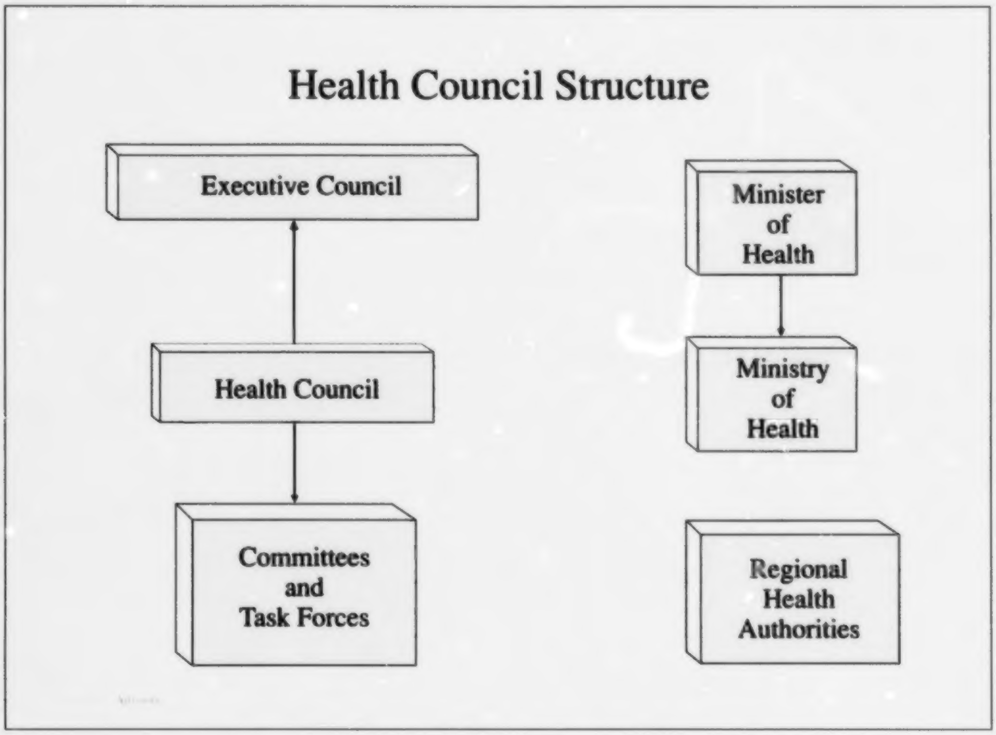
To increase public involvement in health planning, the Royal Commission is proposing the creation of a **Provincial Health Council.**

The role of the Health Council would be as follows:

(a) to advise government on the Provincial Health Policy and Goals;

(b) to provide for broad involvement by the public in the development of a Comprehensive Health Policy; and

(c) to monitor, assess, and report on the performance of the health system.


Health Council Structure
Executive Council
Health Council
Committees and Task Forces
Minister of Health
Ministry of Health
Regional Health Authorities

Comprising ten to twelve members representing a variety of sectors, the Health Council will report to the Executive Council -- i.e., Cabinet -- and act in an advisory capacity to the Minister of Health.

The Health Council must promote a multi-disciplinary approach to health policy development and monitor the health system and health status of Nova Scotians. An initial undertaking of the Health Council will be to advise government on the development of Provincial Health Goals to guide policies that will serve the health needs of the population. The Health Council will also continuously monitor the impact of these policies, and report its findings publicly in an **Annual Report**, which will include an assessment of health status, value-for-money audit, comprehensive audit, and evaluations of special projects.

The immediate appointment of a Provincial Health Council will indicate government's commitment to fundamental change and enhancement of Nova Scotia's health system.

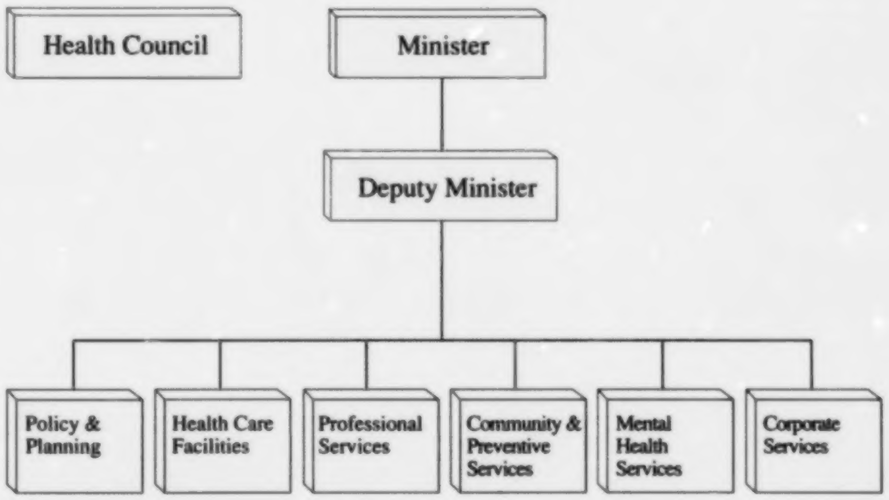
3. THE MINISTRY OF HEALTH

The Royal Commission believes that the key to strengthening the administration of the health care system lies in the creation of a single **Ministry of Health. The merger of the Health Services Insurance Commission and the Commission on Drug Dependency with the current Department of Health and Fitness is, therefore, recommended.** A unified and integrated structure will address planning and policy development for the full range of health services. In keeping with the Royal Commission's proposal for regional administration, the reorganized Ministry of Health's principal role would lie in the development of the **Provincial Health Strategy**, which would flow from the Provincial Health Policy and Goals established by the Health Council. In addition to strategic planning, the new streamlined Ministry would be responsible for setting standards and guidelines, quality assurance, programme evaluation and monitoring of health outcomes. The regions would assume primary responsibility for management of health service delivery.

While Maritime Medical Care may continue the administration of Medical Services Insurance programmes, the auditing, research and analysis responsibilities must be transferred to the Ministry of Health to strengthen the research, policy, and planning capacity.

A **Policy and Planning Division**, reporting directly to the Deputy Minister, would ensure the coordination of all policy development and planning within the Ministry and link research to policy efforts at all levels.

Ministry of Health Structure


Health Council
Minister
Deputy Minister
Policy & Planning
Health Care Facilities
Professional Services
Community & Preventive Services
Mental Health Services
Corporate Services

The programme areas within the Ministry of Health will consist of the following divisions: **Professional Services, Health Care**

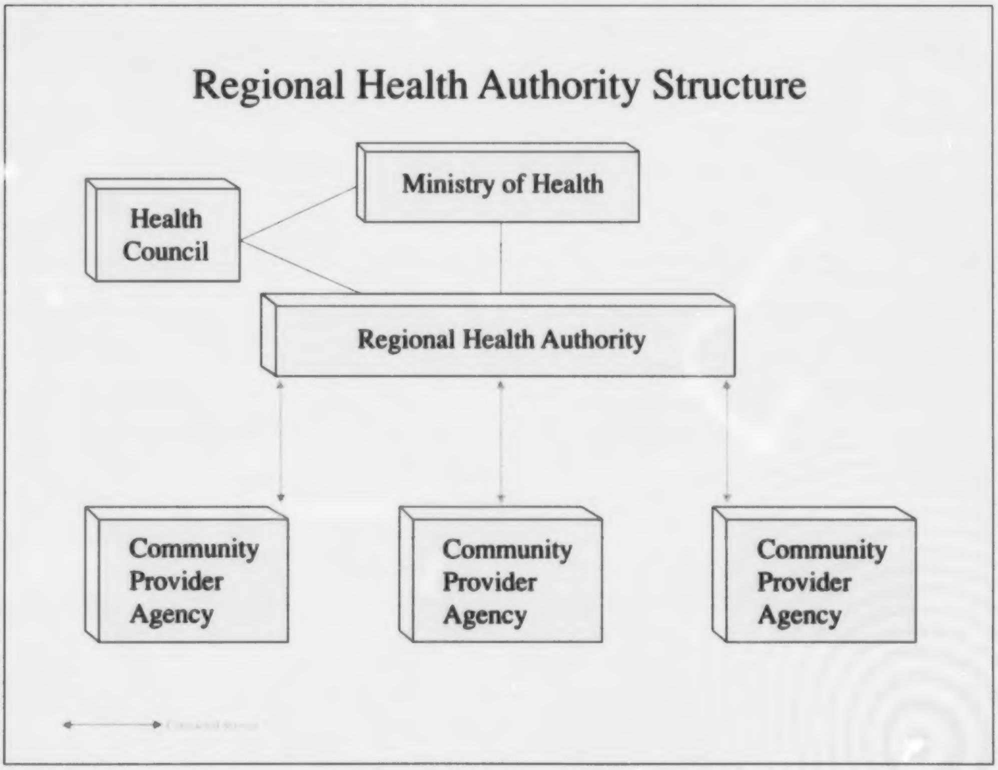
Facilities, Mental Health Services, and Community and Preventive Services. In addition to administering the Medical Services Insurance programmes, Professional Services would manage relations with all health care professional groups. Health Care Facilities, Mental Health, and Community and Preventive Services would engage in long-term planning and programme development activities within their respective areas. **Corporate Services**, as an administrative support division, would include Human Resource Development, Finance, and Public Affairs.

A fundamental concept of the proposed reorganized Ministry structure is participatory management. The Deputy Minister, together with senior management staff, will develop the strategic plan and objectives, allocate resources to the regions, and monitor regional operations.

While the Ministry of Health must improve its research capabilities and information systems, the Royal Commission believes that investment in a multi-disciplinary, university-based **Health Policy and Management Research Centre** is essential for a revitalized policy and planning effort. While such a centre would be expected to seek external research grants, basic funding for the core research and administration should come from an ongoing contract with the Ministry of Health. The other Atlantic provinces should be invited to join in establishing and funding this Centre. Research priorities will be jointly set. The establishment of this Centre will be a key step in developing cooperative research in health policy between government and the research community.

4. REGIONAL HEALTH AUTHORITIES

The Royal Commission has concluded that **decentralization of government functions and delegation of authority to the regions are integral to effective management and efficient delivery of health services.** Regional administration will improve the quality and distribution of services, and effectively address current duplication. **The Royal Commission proposes the creation of Regional Health Authorities which would be responsible for the planning and management of the full complement of health services and programmes delivered within their regions.**


Regional Health Authority Structure
Ministry of Health
Health Council
Regional Health Authority
Community Provider Agency
Community Provider Agency
Community Provider Agency

In accordance with the Provincial Health Council's Policy and Goals, and the Ministry's Strategic Plan, the Regional Health Authorities will develop the **Regional Services Plan**, which will detail the type, mix, and scope of health services to be offered within the respective regions.

The establishment of Regional Health Authorities is predicated on a reduced number of administrative regions in the province. The Royal Commission has observed that the existence of far too many regions unnecessarily complicates service coordination and delivery. Currently, Community Services, Drug Dependency programmes, Health Care Institutions, and Community Health Units do not share the same boundaries, thereby weakening the province's ability to effectively plan and coordinate all health services. The Royal Commission suggests that a task force of the Health Council draw a new administrative map for health care services taking into account population, traditional referral patterns, and other factors.

The regions would be allocated resources on a capitation basis, according to population, demographics and health status. Each Regional Health Authority will allocate its resources to the particular mix of health care programmes that best meets regional needs and priorities, in accordance with provincial guidelines.

Each Regional Health Authority will develop its Regional Services Plan for health programmes based on regional and local priorities. Beginning with an assessment of local needs, it will set priorities for health services and determine the range, extent, and quantity of health services offered in its jurisdiction. Regional priorities will be decided through a participatory process, involving local health care providers, communities, and voluntary agencies. On the basis of the Regional Services Plan, the Regional Health Authority will then enter into and manage contracts for services from agencies such as hospitals, physicians, and community health organizations. The Regional Health Authority will not itself provide health services directly to the community. It will evaluate, and be held accountable to the Minister of Health for, the effectiveness of health services in its area.

Each Regional Authority will be governed by a Board of qualified and committed community members, including consumers and providers of health care, and employ a Chief Executive Officer and staff to carry out its management functions.

5. INTERSECTORAL COORDINATION

Coordination of government departments with health-related policy interests must be strengthened at both the central and regional levels. Key departments with related policy interest--such as Health, Community Services, Education, Environment, Housing, and Labour -- should be brought together under the Cabinet Secretariat to coordinate provincial policy and administration. Appropriate communication between this Committee and the Health Council must also be established.

Joint strategies should be developed to deal with specific target populations with poor health status, such as low income single mothers, the frail elderly, chronically ill children, or physically and mentally disabled adults. A combined and coordinated approach should more easily permit addressing of gaps frequently identified to the Royal Commission during its Public Hearings, such as chronic care.

6. INTER-PROVINCIAL COORDINATION

Planning for tertiary care and health professionals' training programmes should take into consideration the goals and needs of other Maritime provinces. The supply of physicians presents a special case for inter-provincial coordination due to interprovincial migration. It is essential that the role of the Faculty of Medicine at Dalhousie be considered in a Maritime regional context to plan intern and resident programmes which will best reflect regional needs.

Similarly, the assessment of medical technology represents a complex problem which is beyond the resources of Nova Scotia to fully address. Inter-provincial cooperation is essential in determining appropriate clinical use of safe and effective technological devices, drugs, and procedures. While this research will most often be done outside of Nova Scotia, its results must be considered and applied in planning for the use of health technology in this province.

The Royal Commission proposes the establishment of a **Maritime Provinces Health Secretariat** to coordinate health policy for the region.

7. HEALTH FACULTIES - DALHOUSIE UNIVERSITY

The roles of the Faculties of Medicine, Health Professions, and Dentistry at Dalhousie need to be considered in a broad Maritime context. These Faculties are integral parts of both Dalhousie University and the health care systems of the Maritime provinces. As components of three -- and sometimes four-- provincial health care systems, they focus on providing specialized services, as well as addressing most of the human resources requirements in health for the Maritime provinces.

There is some concern that the health system may be driven by educational and professional aspirations. Many of the specialties and subspecialties recognized by the Royal College of Physicians and Surgeons may not be viable programmes if regional health needs are the determining factor.

The Royal Commission believes that the Maritime health care systems and Dalhousie University would benefit from the formation of a **Health Faculties Board** within the organizational framework of Dalhousie University. This Board would continually review and assess the roles and responsibilities of the Faculties of Medicine, Health Professions, and Dentistry at Dalhousie, and oversee the financial administration of these Faculties on behalf of the Board of Governors of Dalhousie University and those Departments of Health that provide direct funding.

HEALTH PROFESSIONS

The Royal Commission believes that health human resources planning is essential to address the changing orientation of the health care system and to manage expenditures. As the health care system evolves, health personnel requirements and education will change. A need is developing for health professionals who may substitute for, or further complement the role of, physicians. **The Royal Commission recommends that the Ministry of Health, in consultation with the Health Council, develop a comprehensive health human resources plan based on health needs of the population. The present and future roles of all health professionals must be reviewed in order to determine appropriate entry points to the health system, as well as the numbers, mix, training, scope of practice and distribution of these professionals in Nova Scotia.**

1. NURSES

Nursing is the largest health profession in the province. In the last ten years, the number of registered nurses has outpaced the population growth. Nonetheless, the province has experienced an increase in geographic and specialty-based vacancies due, in part, to changing demographics, increased severity of illness, decreased utilization of support staff, non-traditional nursing employment, and a trend toward part-time and casual employment. **Coordinated planning by the Ministry of Health is essential in order to ensure the continued availability of an adequate supply of nurses in Nova Scotia.**

The major issues confronting nursing relate to worklife conditions, education and professional development, and the evolving role of nursing in the context of changing goals of the health care system. Demands for control of their own schedule, flexible hours, permanent shifts, self-scheduling, and job-sharing are increasing. As in many other sectors of the economy, **health care employers must recognize and support the personal and family commitments of their employees** if they wish to reduce absenteeism and turnover. The Royal Commission wishes to stress its view that **fundamental changes, and not merely additional funds, are required to effectively address the root causes of discontent in nursing.**

Management of workload, a central issue to nurses, is extremely difficult due to the lack of flexibility in the system. Although a workload measurement system provides the potential for efficient use of resources, it may not realistically consider the demands made upon nurses. A key factor to the success of any workload measurement system is the capacity of staffing to the appropriate levels identified through systems evaluation. **Nursing workload measurement systems must be developed as a component of a broader province-wide management information system which is tied to the budgetary process and enables an appropriate level of funding for nursing departments.**

In 1984, the Registered Nurses Association of Nova Scotia adopted the position of the Canadian Nurses Association that a baccalaureate degree become the minimum educational requirement for entry into the nursing profession by the year 2000. This call for higher requirements for entry to practice has met with opposition from hospital organizations, unions and provincial governments. As 84 per cent of registered nurses in Nova Scotia are diploma trained, a change to the entry to practice requirement will entail major modifications in nursing education. **There are serious implications for the supply of nurses, given the relative sizes of the baccalaureate and diploma programmes in Nova Scotia, which must be discussed and resolved.**

The career structure of nursing needs to be defined and mechanisms created for recognition and commensurate status and pay. **Barriers to continuing education must be addressed by increasing support and accessibility to programs.**

Research studies in Canada and the United States estimate that between 40 and 90 per cent of primary physician visits could safely be delegated to nurses who have been appropriately trained to have initial contact with patients without physician supervision. Estimated savings, had there been such a delegation, were estimated to be 10 to 15 per cent of total expenditures on physician services.

In their capacity as providers of primary health care, nurses could serve an important role in community health service, not so much by replacing medical care but by encouraging self-reliance in the community, through both formal and informal health and social support programmes. They could also screen and route individuals, which might help lower the inappropriate use of other health professionals. Better use of nurses has great potential for improving access to care, the quality of care, and the cost-effective use of the health care system. **The policy and administrative framework for an expanded role for nursing in the delivery of primary health care in Nova Scotia must be established through a process involving collaboration of nurses** and other health professionals, administrators, government, and educational institutions.

The Royal Commission has examined the broad implications for change in the delivery of health care and maintains that the role of nursing must be re-defined within that conceptual framework. In light of changing modes of delivery of health services, the role of nursing and nursing education must evolve simultaneously, if nurses are to meet the needs of the communities they serve. The Strategy for Health and the Guiding Principles developed in the Report have far-reaching implications for the nursing profession. These must form the conceptual framework for the resolution of these pressing questions. Representatives from professional and labour organizations, management, educational programmes, and licensing bodies of the nursing and related professions must cooperate to address the professional, worklife, and managerial issues confronting the nursing profession.

2. PHYSICIANS

As primary gatekeepers to insured health services, physicians to a large degree determine use of other components of the health system -- hospital care, diagnostic testing, the introduction and use of technologies, specialist referrals, and prescription drug use -- and thus affect overall health care expenditure. A strategy to manage the administration of physicians' services must involve an integrated approach, consisting of concurrent policies on physician supply, distribution -- both professional

and geographic — and utilization. The Ministry of Health must place the utmost priority on physician human resources planning strategies, working in consultation with key groups. A comprehensive plan must be developed to address the supply, education, distribution, demand for, and remuneration of physicians.

Managing the Number of Physicians

Planning for the number and deployment of physicians should form an integral part of the overall health care planning process, and should be linked to regional population-based medical care needs. This process must analyze health status indicators, and then devise the most beneficial and cost-effective use of physicians. It must also ensure suitable distribution of physicians throughout the province so that all residents have equal access to appropriate levels of medical care.

Two major contributors to rising Medical Services Insurance expenditures in Nova Scotia have been the increase in physician supply and an increase in number of services provided by each physician. The number of physicians in Nova Scotia has almost doubled since 1970 and is forecast to continue to rise by 2.2% to 2.5% annually. Population growth over the same period is forecast to increase at an annual rate of only 0.4% Despite the increasing physician to population ratios, the rate of per capita physicians' services is increasing.

Immediate controls on physician numbers can be achieved through limiting the number of physicians practicing in the province. A primary determinant of the rate of growth of physicians in Nova

Scotia is the rate of growth of physicians in Canada. **The province must, therefore, give utmost priority to the achievement of a federal-provincial agreement for a substantial reduction in the rate of growth of physicians in Canada, which is currently more than four times the rate of growth of the population. The role, size, and orientation of the Dalhousie University Faculty of Medicine must also be examined with respect to servicing the needs of both Nova Scotia and the Maritime region. The Ministry of Health must establish targets for physician numbers, in total and by specialty, commensurate with the provincial health strategy, and the necessary measures required to achieve these targets, including reductions in enrolment and immigration, should be immediately implemented.**

In the hospital setting, physician "requirement" information should be reviewed in conjunction with utilization rates for the physician's specialty, the hospital's workload, and the region's utilization pattern. The Regional Health Authorities will play the primary role in determining physician human resources requirements for institutions within their regions based on the Regional Services Plan. All hospitals in a region will, in conjunction with the Regional Health Authority, together prepare hospital role studies for the region, which will include assessments of medical staffing requirements. **Medical staffs of community, regional, and tertiary care hospitals must be established at levels appropriate to the service roles established in the Regional Services Plans.** No new physician should be granted a position or hospital privileges without an institution and the Regional Health Authority first conducting an impact analysis and receiving official approval from the Ministry of Health.

Most provinces have been considering measures for limiting the numbers of practicing physicians in their jurisdictions, either by controlling licensing requirements, or by attempting to control billing numbers, both in terms of geographic location, and by specialty. To achieve a better distribution of physicians' services and to effectively contain costs on Medical Services Insurance expenditures, **the Government of Nova Scotia must immediately restrict the issuance of new billing numbers to physicians wishing to practice in Nova Scotia, in a procedurally fair manner.**

Managing Payments to Physicians

Historically, annual outlays for physicians' services have always exceeded estimates. **The open-ended nature of fee-for-service reimbursement has been a decisive factor in overall cost escalation. The Government of Nova Scotia must be able to control the rate of growth of its public expenditures on all its programmes in order to exercise fiscal responsibility.**

Analysis of past changes in fee schedules and physician practice patterns has demonstrated that control over fee increase in and of itself is not an effective means of controlling the rate of utilization of health services and physician expenditures. In fact, there is evidence that when fee-schedules are frozen, or during periods of difficult fee negotiations, there is a more rapid growth in the numbers of services provided per physician to compensate for perceived "lost income". Provinces are becoming unable, and indeed unwilling, to pay for this excessive growth in expenditures on physicians' services. As a result, there has been a new impetus to devise methods for controlling the rate of growth of physician use and expenditures.

The Royal Commission believes it is time to reconsider physician remuneration, and specifically the fee-for-service mode of remuneration, as the current dominant type of payment system for physicians. **The Royal Commission proposes a mixed system of remuneration, which would provide both health care users and physicians with more options and a broader scope for choice.**

Capitation and salaried payment should be introduced for physicians in certain practice settings. Capitation provides payment on the basis of the number of patients receiving care, rather than the number of services provided, and is most appropriate to the provision of community-based primary care, as offered in Health Service Organizations and Community Health Centres. Community Health Centres and Health Service Organizations have been shown to offer quality care to patients at reduced cost to the overall health care system. **The Government of Nova Scotia must develop the administrative framework and establish these alternate settings for the practice of medicine.**

The Royal Commission questions the equity of the fee-for-service system, which permits a wide range of incomes to be earned by physicians practicing the same specialty. It is suggested that the question of physician compensation levels be examined by the Provincial Health Council in view of the mixed systems of remuneration of physicians recommended in the Report. The Royal Commission suggests fair and equitable compensation be given to physicians engaged in alternate remuneration modes and practice settings.

Adoption of a ceiling for Medical Services Insurance expenditures

should be viewed as part of an evolutionary process whereby new policy tools and administrative mechanisms develop to better achieve particular government programme and fiscal objectives. **Managing the rate of growth of total Medical Services Insurance expenditures converts an open-ended, volume-driven, fee-for-service system to a closed expenditure system, comparable to most other government programmes.** The establishment of a ceiling on the annual rate of growth of expenditures would allow the fee-for-service system to continue to function as a volume-driven system up to the point where the expenditure limit was reached. Subsequently, year-end adjustment mechanisms would be applied to prevent expenditures from rising further in that fiscal period.

The Royal Commission is proposing that the administration of budgets for physicians' services be delegated to the Regional Health Authorities. Regional ceilings would allow separate target rates of growth, or expenditure limits, to be set for each Health Authority. A regional budget based on a capitation system would form the basis for budget allocation for physicians' services. **Funding to each region would be on the basis of services for its residents, and not on the basis of the number of physicians in the region.** Premiums could be awarded for services provided to residents of "under-serviced" areas, and less for services in "over-serviced" areas. This entails built-in incentives for physicians to relocate to under-serviced areas.

Teaching Physicians

The Faculty of Medicine of Dalhousie University includes some 183 full-time and approximately 230 part-time faculty in 14 clinical departments, excluding Community Health and Epidemiology and

Continuing Medical Education. Physicians who hold full-time academic appointments spend time in teaching and research, in addition to providing patient care. The plans for the remuneration of these full-time faculty are administratively cumbersome and do not promote sound management and accountability. The Royal Commission maintains that it is time to reassess the funding of full-time academic positions in the Faculty of Medicine. **The Royal Commission believes that block funding the clinical component of teaching physicians' incomes would give government the desired measure of control and accountability over expenditures.**

Physicians as Resource Managers

Physicians must share the responsibility for making the health care system successful by participating in its planning and financial management. In the institutional setting, clinical heads must be encouraged to assume a stronger role in the management of departmental budgets. In individual or group practice, accountability for the use of health care resources should be strengthened. **The use of physicians' practice profiles, i.e., specific information on what services a physician performs, should be introduced on an individual and aggregate level, to guide informed review and examination of the use of health care resources and services.** Financial incentives should be introduced and used to encourage sound management practice and accountable decision-making, and to promote changes in delivery and utilization patterns within clinical units of institutions. Training should be provided to assist physicians to manage health care resources effectively, and to be accountable for their patterns of practice which have implications for institutional and regional resources as a whole.

3. ASSOCIATE HEALTH PROFESSIONALS

Associate health professionals are those who assist the traditional professions of medicine, nursing, and dentistry in delivering health services to meet specific needs. They include physiotherapists, occupational therapists, speech language pathologists and audiologists, medical technologists and technicians, pharmacists, clinical psychologists, social workers, and pastoral care workers. The supply of these health professionals must be sufficient to carry out the functions that complete the full range of health care services.

Although there are no reliable estimates of the extent, there have been shortages in supply for many of these disciplines. This shortage of human resources is a problem that has been identified at provincial, national, and international levels. **The Government of Nova Scotia, in conjunction with the other Atlantic provinces and the universities involved, must establish enrolment targets based on demonstrated regional needs for the associate health professions.**

Increased educational output alone does not ensure increased supply of practitioners within a particular jurisdiction. Strategies aimed at retaining graduates should be used in combination with expansion of training programmes for both professionals and auxiliary workers to insure an increased supply. Competitive recruitment policies must be developed as well in order to attract associate health workers to the province and thereby improve the distribution of services to rural areas. Measures could include special incentives, recruitment of immigrants, or service contracts linked to training assistance.

Several professions, most notably physiotherapy, have experienced loss of practitioners to private practice as a result of low satisfaction with careers in the public sector. Other contributing factors to the high turnover and low retention rate of associate health professionals are age and gender. The majority are women who will take temporary leave due to family responsibilities and may move due to career demands of their spouses.

As with nursing, addressing the inactivity and attrition that results from these demographic characteristics is fairly straightforward. Low job satisfaction, job stress, salary scales, career advancement are all factors which must be addressed in order to retain and increase the number of qualified and experienced associate health professionals.

REVITALIZED SERVICES

The primary objective of the province's health care system is the delivery of programmes and services that meet the needs of Nova Scotians. It is essential that the planning, management, and funding structures of the entire health care system be focused on providing high quality programmes and services in a cost-effective manner. Emphasis and priorities, as well as the social and ethical implications of policy decisions, must be considered: dollars spent on unnecessary hospital beds means fewer funds for other health services, such as chronic care, palliative care, home care, and pastoral care.

There is a need to shift emphasis away from the health system's current orientation on institutional care and physician services. The Royal Commission maintains that a better balance should be struck in the allocation of resources between the curative and preventive components of the health care system. The delivery of health care has traditionally been located primarily in hospitals. There is increasing understanding that many health care services can be provided safely and appropriately in settings such as community clinics, ambulatory care centres, and the home.

Certain elements in the range of health services are not as developed as is necessary to meet needs effectively. A better mix of health care professionals and new entry points to care will help achieve a more appropriate and efficient use of health services. "Inappropriate" use is often due to a lack of more appropriate services. For example, use of hospital outpatients departments for care which could be provided in a physician's office is often due to the lack of access to physician services after normal business hours; prolonged stays in acute care institutions may be due to the lack of intermediate or long-term care programmes. **A comprehensive range of appropriate health services must be available for all stages of the life cycle, from pre-natal care to care for the terminally ill. These services must also span the entire spectrum of health care, providing preventive, curative, rehabilitative, and palliative care to residents of the province.**

1. COMMUNITY HEALTH PROGRAMMES

The concept of health traditionally focused on the absence of illness or infirmity. Today, health is considered in terms of the ability to achieve one's potential and to respond positively to the challenges within the social, physical, and economic environment.

Community health programmes represent a great potential for improving the health status of Nova Scotians through illness prevention, public education, and health promotion programmes. Under a decentralized administration, communities could identify and address their own health issues. Government would support these initiatives by providing information and resources in order to help communities organize themselves to take action on health issues.

Health promotion and disease prevention activities must be strengthened in Nova Scotia. The Community Health Services Division, which administers these programmes, was allocated four per cent of the total health care budget in the 1989-90 fiscal year. **The Royal Commission sees community-based programmes as essential to safeguarding the health of Nova Scotians as well as to the effective management of health care resources.**

While recognizing the individual's responsibility to care for his or her own health, **policies must address the external social, educational and environmental factors which affect society's ability to improve health status.** An effective health promotion and disease prevention strategy should be based on the Provincial Health Goals as determined by the Provincial Health Council, and should be directly aimed at the needs of Nova Scotians.

The Ministry of Health must allocate non-transferable resources to foster the development of health promotion and community-based programmes and also establish a Community Health Initiatives Fund in support of health promotion and illness prevention projects at the community level.

2. COORDINATED HOME CARE

The Coordinated Home Care Programme is an example of an interdepartmental, interdisciplinary, and intersectoral approach to service delivery. It is a collective effort of the Departments of Community Services, Health and Fitness, Housing, Municipal Affairs, and the Senior Citizens' Secretariat. This coordination facilitates access by potential users and provides for comprehensive services.

Home care is directed at those with long-term needs who might otherwise be institutionalized. The Royal Commission appreciates the necessity for short-term limitations while introducing such a complex programme in order to maintain programme quality and effectiveness. However, **the Royal Commission believes the Coordinated Home Care Programme should be expanded** to other groups, such as patients released from hospital under early discharge programmes. The programme should also be evaluated, including a review of programme effectiveness and of the financial arrangements with municipal and voluntary agencies to ensure they are adequate.

3. INSTITUTIONS

As part of the new Strategy for Health, it will be necessary for all types and levels of health care institutions to reassess their roles and define their mission within the framework of the provincial and regional plans. Institutional mandates will need to be set within the Regional Services Plans and form part of an integrated facilities strategy linking all health care facilities within the region.

While several other provinces show a trend in declining numbers of hospital beds in favour of other types of institutional beds, there is no evidence of this trend in Nova Scotia. **The Commission contends that a shift in health orientation and, consequently, in the distribution of resources within the health**

system is essential. A reassessment and redistribution in beds from acute care to other institutional forms of care must take place. **An increased emphasis must be placed on ambulatory and community-based care.**

Hospitals must be used in ways that are more flexible and suited to the needs of Nova Scotians, strengthening existing community-based programmes to establish the community as the primary setting for health care. In many areas of the province, these changes can be accomplished by redefining small community hospitals as community health centres. These centres would emphasize ambulatory care and a multi-disciplinary approach to community care, drug rehabilitation, and mental health services, among others.

4. FURTHER RELATED SERVICES

The emphasis on the treatment of illness in the health care system has resulted in a tendency to overlook the importance of some other aspects of care that promote individual well-being during or following medical treatment. Services which assist an individual to cope with his or her condition, such as rehabilitative services, palliative care, and pastoral care are equally important. Common to these services is a need for coordination, integration, and accessibility throughout the province.

Pastoral care seeks to encourage and enable self-understanding and an awareness of one's spiritual resources. The Royal

Commission believes that pastoral care services are an integral part of the health system as reflected in the guidelines established by the Canadian Council on Hospital Accreditation. **Pastoral care should be professionally planned, directed and coordinated within the health regions, and implemented by appropriately prepared and supervised pastoral care workers.**

Rehabilitation involves restoring the individual to full or optimal health following injury or illness. In Nova Scotia, these services are focused at the Nova Scotia Rehabilitation Centre in Halifax. There is a need to ensure that treatment begun in tertiary care institutions are followed through adequately when patients return to their homes. **A review should be undertaken by the Ministry of Health and the Provincial Health Council to ensure the completeness of rehabilitation services in the institutional, community, and home settings.**

Palliative or terminal care compels the dedication of a small number of professionals and volunteers whose efforts have traditionally been practiced in a hospital or institutional setting. There is, however, a growing recognition that much palliative care occurs in the home and that often a relatively small proportion of individual and family time needs to be spent in the hospital. Appropriate educational programmes should be provided on a continuing basis to patients, family caregivers, and palliative care workers. **Palliative care programmes must be recognized as integral components of health services at the tertiary, regional and community levels. Upon assessment and admission to a palliative care programme, an individual should be eligible for all required medication, supplies, and services as a part of the insured health services in any setting approved by a physician.**

5. MENTAL HEALTH SERVICES

The field of mental health is a complex, multi-disciplinary and multi-agency field. Users of the services are often reluctant to seek help and sometimes present the most difficult problems of all patients in the health care system.

The Psychiatric Mental Health Division of the Department of Health and Fitness administers a budget of which 80 per cent is taken up by expenditures for inpatient hospitalization services. Very little of its budget or work could be described as community mental health services. The Royal Commission's recommendation to drop the term "Psychiatric" in the Division's name signals a proposed broadening of approach.

Few resources are committed to research and evaluation. Psychiatric outpatient services offered through mental health clinics need to be properly evaluated in order to clarify their appropriate function and role within the field of mental health care, as well as to develop strategies for delivering multi-disciplinary mental health services. Planning and information requirements for mental health services need to be reviewed, and the overall quality of care evaluated, with a view to increasing the emphasis on community mental health services and mental health promotion.

Human resource needs must be addressed, and the use of alternate professionals should be explored to meet the need for services. Use of clinical psychologists represents an opportunity to achieve greater cost-effectiveness in the delivery of some mental health services which the Royal Commission believes should be pursued.

The specialty of child psychiatry continues to experience a steady increase in demand for services. Additionally, under the Young Offender's Act, the courts require assessments of adolescents that the psychiatric facilities have been unable to provide. There is also a need to more effectively provide care for the mental health of Nova Scotia's correctional centre population.

6. DRUG AND ALCOHOL REHABILITATION PROGRAMMES

An extensive network of services has emerged in Nova Scotia as a result of cooperative efforts between the Commission on Drug Dependency and other agencies which provide drug and alcohol rehabilitation services. The Commission on Drug Dependency is commended for having clearly established and implemented its policy objectives and mission. While variations in service delivery of drug and alcohol rehabilitation programmes throughout the province have resulted in various models, inequities in the accessibility and range of available services have emerged. The lack of central coordination for funding of all drug and alcohol rehabilitation programmes has resulted in an inconsistent policy on federal cost-sharing. **The provincial government and agencies providing these services should pursue all cost-sharing opportunities for drug and alcohol rehabilitation programmes.**

The Royal Commission has noted that the quality of the physical facilities administered by the Commission on Drug Dependency needs improvement. Many of the present locations are inadequate and dispiriting for a rehabilitation programme. **The Ministry of Health must allocate resources for improved facilities, new locations, and a more supportive environment for drug and alcohol rehabilitation programmes, to enhance programme delivery and reduce barriers to programme entry.**

7. PHARMACARE PROGRAMME

Since 1975, the Pharmacare Programme has provided prescription drugs to seniors and special needs groups. It is the fastest growing health care expenditure in the province, with total annual expenditures over the past five years increasing at a higher rate than other provincial health programmes. **Nova Scotia's Pharmacare Programme is now the most expensive provincial drug benefit programme in the country on the basis of cost per insured person.** There are limited cost control measures in place at the present to check this upward trend on Pharmacare expenditures.

Some calculations indicate that over $3 Million in savings could be realized each year through **adoption of a lowest-available price drug product programme.** The current incentive for generic drug substitution is only marginally effective in encouraging the use of generic substitutes for brand name drugs. In addition, **adoption of a pharmacy/computer linked system, or similar system,** would allow for improvements in both quality of care, utilization, and cost management of the Pharmacare Programme.

A serious concern associated with the drug benefits programme is the effects of inappropriate medication on the health of Nova Scotia's senior citizens. In Ontario, over 20 per cent of seniors admitted to acute care hospitals are diagnosed as having prescription drug-related complications. Over-medication results in both health-related problems and increased expenditures. Thus, both quality of care delivered through the Pharmacare Programme and excessive costs are major concerns. **The Ministry of Health should develop and coordinate programmes to address issues of over-medication by physicians and the misuse of prescription and over-the-counter drugs by Nova Scotians.**

Pharmacare coverage does not extend to several groups, such as most persons on social assistance, children suffering from chronic diseases, and Nova Scotians confronted with catastrophic drug costs. **Social assistance recipients need uniform coverage for themselves and their families on a province-wide basis. Coverage should also be provided to Nova Scotians who face "catastrophic" drug costs.**

8. AMBULANCE SERVICES

The Royal Commission stresses the importance of achieving greater value for money with respect to ambulance service in the province. The Royal Commission's recommendations with respect to ambulance service propose a reallocation of resources between emergency care services and non-emergency transportation services which would lead to an improved quality of ambulance service for all Nova Scotians.

Coordination of long distance transportation of patients at the provincial level, elimination of areas of duplicate service by private operators, and increased use of patient "shuttles" or non-emergency transportation should increase efficiency of the overall system.

The Royal Commission believes that the existing Ambulance Advisory Board should be dissolved. The Provincial Health Council should advise on training, equipment standards, certification, documentation, and medical review. This advice should be drawn from a broad base, including representatives from physician and nurse specialists in emergency services, ambulance attendants, and service operators. Quality of care and accountability should be addressed by making all standards public in the form of regulations.

Guidelines on the utilization of ambulances and non-emergency transport services should be developed to maximize the use of non-emergency transportation systems while maintaining an appropriate emergency response capacity.

9. HEALTH CARE TECHNOLOGY

The use of new health care technologies is a starting point for the debate on the kind of health care system desired by, and most appropriate to, the needs of Nova Scotians. Availability and feasibility of new technology must not be the sole criteria for its application.

The Royal Commission has proposed that a standing committee of the Health Council should be tasked with leading the discussion on the social value and cost-benefits of health care technology.

The use of health technology must be based on defined population needs. Results of technology evaluation should be incorporated into health policy areas such as regionalization, human resources planning and education, physician utilization reviews, hospital funding, and physician reimbursement mechanisms. The advantages of new technology and its consequences on management, operations, and servicing must be ascertained and taken into consideration.

It is the Royal Commission's belief that a managed approach to the acquisition and use of technology is imperative, and must take place within a cogent policy framework. Technology must be introduced in the context of appropriate resource allocation, and evaluated with respect to health results obtained. In addition to the development of an inter-provincial coordinated process for technology assessment, some **practical limitations on the use of technology should be immediately implemented. These include not providing payment to hospitals or physicians for services using unapproved technology, and the development of clinical guidelines and protocols for the use of specific health technologies by the Health Council.**

FINANCING THE HEALTH CARE SYSTEM

The previous sections on the **Guiding Principles, New Planning Dynamic** and **Revitalized Services** have laid out the vision and operational structure required for the **New Strategy for Health.** The Royal Commission is firmly committed to the principle of public financing of health care services. In reviewing the financing required to support this health system, the Commission has concluded that the current levels of expenditure on health care in Nova Scotia are fully adequate to provide quality services to Nova Scotians in a fiscally responsible manner. **Health spending must be seen as a key socio-economic investment yielding high dividends in terms of general societal well-being and productivity.**

There is a pressing need, however, to scrutinize the results of these health care expenditures, and to maximize outcomes from the considerable resources invested. The acute care domination of our system, which has set a rigid pattern of expenditures on hospitals and physicians, must be effectively adjusted in favour of a more balanced approach. Gaps in the comprehensiveness of health services must be addressed. Steps must be taken immediately to improve the financial management and control of the health system.

Future health policy must be developed within the broader public policy context, taking into account all of the determinants of health. The impact of all government policies on health objectives must be assessed and policy targeted to specific outcomes and results. **Adequate levels of financing of the health care system, or appropriate rates of growth, cannot be discussed** without first establishing policy objectives with respect to results.

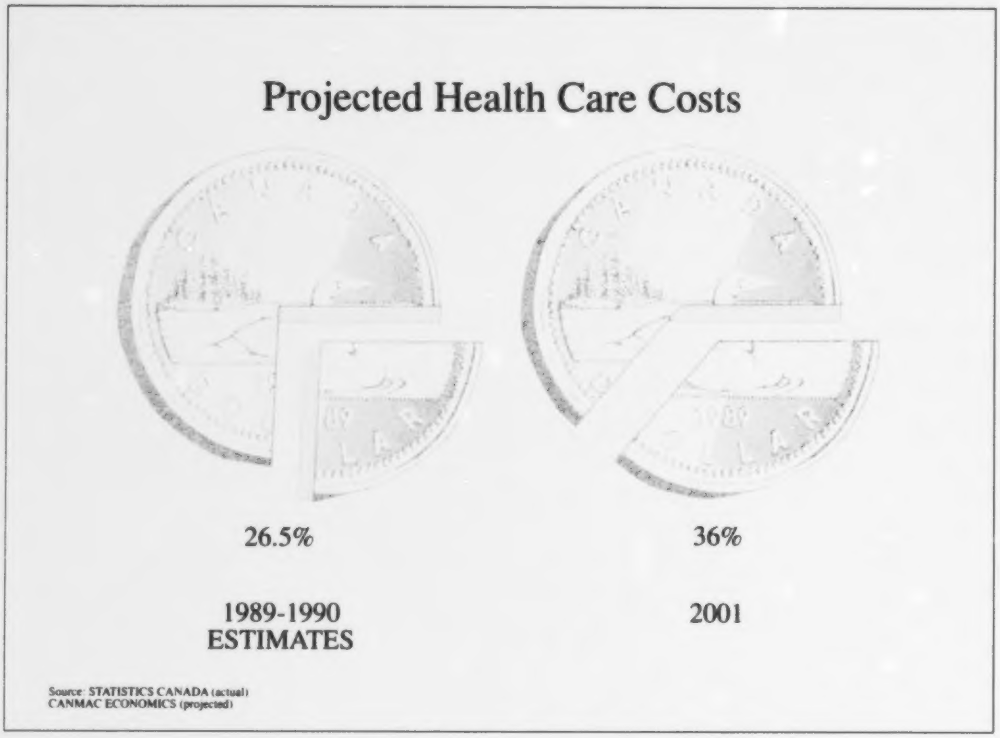
While maintaining that the current levels of financing are adequate to providing quality health care to the Province, the Royal Commission contends that the capital and human resources allocated to health care can be more efficiently utilized so as to realize better value for the money spent. A focus on results, together with the proposed reallocation of resources and structural realignments, should lead to improved service quality and a better return on health care dollars.

The Economic Reality

The health care system must be analyzed in the context of the global economic activity of the province. The degree of wealth generated by the productive sector of the economy determines the level and sustainability of spending on health and social services. Health care expenditures must be planned and managed as an intrinsic component of an integrated economic strategy, as they dynamically affect and are affected by other sectors of the economy.

Health care is currently the single largest provincial expenditure, consuming $1.1 Billion or 26.5 per cent of the provincial budget. In addition, the province manages capital assets with an estimated replacement value of approximately $4 Billion. The provincial debt is in the range of $4 Billion, with debt servicing charges projected at $586 Million or 16.6 per cent of provincial government expenditures. It is estimated that if current trends continue unchecked, health care costs will reach

$3 Billion by 2001, or 36 per cent of provincial expenditures, as the figure below demonstrates.



Projected Health Care Costs

Source: STATISTICS CANADA (actual)
CANMAC ECONOMICS (projected)

This expenditure pattern is forecast to occur in the face of undetermined economic performance to the end of the century. **The implication of this is a reduction in the ability of the province to pay for health care services,** if all other factors are held constant. It is thus imperative to tailor health care programmes to demonstrated health needs, streamline health services management, and develop more efficient spending policies.

1. FINANCIAL MANAGEMENT

Federal-Provincial Funding

Amendments to the Established Program Financing Act of 1977 have increased fiscal pressures on the provinces and have concentrated the burden of health expenditures at the provincial level. The Established Program Financing block funding formula is tied to growth in the national economy rather than to growth in health care costs. Unfortunately, federal transfers have not kept pace with the increase in health care costs. **Federal contributions as a percentage of provincial expenditure in Nova Scotia have fallen approximately ten percentage points since 1979-80, whereas growth in health expenditures in Nova Scotia was 285 per cent over the same period.**

It is anticipated that federal contributions will continue to represent a declining proportion of total provincial health spending. Nova Scotia's revenue sources are not expected to increase significantly given the economic and demographic projections reviewed earlier.

The Royal Commission recommends that the Government of Nova Scotia, together with the other provinces and the federal government, undertake a review of the Established Programmes Financing Act to assess the impact of the federal government's decreasing share of provincial expenditures on health programmes.

Provincial Management

The Royal Commission proposes that the province should set specific objectives and targets with respect to expenditures for all health programmes. **Tighter fiscal controls and evaluation of the system need to be established.** Revenue from all sources must be maximized, including cost recovery, cost-sharing, and revenue generation, to reduce some of the fiscal pressures resulting from health spending. Funding structures and financial incentives must be designed as measures to obtain specific health outcomes.

2. A MORE EQUITABLE FUNDING STRUCTURE

As a result of open-ended funding mechanisms, increases in health spending are exceeding the ability of the province to pay for health services. Furthermore, the provision of health care services is not evenly and equitably distributed across the province.

In keeping with its call for regional administration, the Royal Commission proposes a **regionally-based funding structure**, which would consolidate and integrate the various payment mechanisms now in existence. **Regional Health Authorities would be responsible for the administration of expenditures for all health care programmes, including institutional care, physicians' services, and community-based programmes.** The Regional Health Authorities will be allocated a funding envelope based on their

Regional Services Plan, which will specify the range, volume and mix of health services. Required services for their population, as determined by the Regional Services Plan, would be contracted with various health care providers. Regions will be responsible for purchasing the **most cost-effective services in terms of health outcomes**, within that budget. Regional Health Authorities will be held accountable for improving the health status of their communities and for obtaining value for money from the resources they consume.

Regional funding would be allocated on a **weighted capitation basis** and set prospectively, according to the size and profile of the regional population. Analysis of the region would include population, demography, epidemiological profile, and current levels of servicing. **This capitation formula will allow for a more equitable distribution of health care resources throughout the province and establish a sounder base for the provision** of **health services.** Regions that are currently over-supplied with health services would find their resources readjusted in favour of disadvantaged areas.

3. INSTITUTIONS

The Public Hearings brought to light the need to reduce emphasis on inpatient care. Improved population-based planning, management information systems, financial management, and an extended budgetary cycle were also emphasized as critical to a revitalized health care system. Government involvement in the day-to-day operation of hospitals was seen as inappropriate to their efficient management.

A general perception that health care is synonymous with hospital care prevails throughout the system. Much of the problem of escalating hospital costs stems from the high utilization of these facilities. There is almost universal agreement that the current distribution of beds, both in a geographic and specialty sense, is a major cause of escalating costs.

The Regional Health Authorities will have the challenge of reassessing and re-defining the use of facilities within their respective regions. To assist this new emphasis, the Ministry of Health must develop funding structures and financial incentives to foster the use of alternate and less expensive modes of delivering health care. Reimbursement mechanisms and organizational structures must be realigned to promote coordination of institutional and community-based services.

The Royal Commission is proposing the development of a population-based, prospectively-calculated hospital funding system which provides for high quality care in the most cost-effective setting and is more closely focused on productivity or outputs.

The Royal Commission strongly endorses the recent decision to change the status of the Victoria General Hospital and suggests that this process should be accelerated. The status of the Nova Scotia Hospital should also be similarly regularized. Boards of provincially-owned hospitals should be able to nominate new members in the same manner as other hospitals.

It is crucial that capital planning be conducted within the framework of a provincial plan which takes into account changing morbidity patterns and the need for facilities which will meet

the health needs of the population, especially with respect to long-term chronic care. The Regional Health Authorities will develop their Regional Services Plan based on both regionally-defined needs and provincial goals and objectives. These planning documents will form the basis for the Regional Health Authorities' contracting for services with a variety of health facilities. **Until such time as these plans are established, a freeze must be placed on all capital construction, major capital equipment acquisitions, and new programmes.**

The Royal Commission examined the extent of indirect teaching costs in teaching hospitals after adjusting for severity of illness, size, and geographic location. Although significant in actual dollars, these costs are a small component of the total costs of these hospitals. The Royal Commission maintains that these costs should be recognised as legitimate service costs, not as subsidies for teaching. The teaching function should also be extended to hospitals outside the Halifax-Dartmouth area.

Attention also needs to be directed to the role of the Halifax hospitals in meeting the needs of the Metropolitan area. The necessity of assigning all beds in Halifax hospitals to teaching units should be reassessed in terms of patient access and quality of care.

4. EDUCATION OF HEALTH CARE USERS AND PROVIDERS ON APPROPRIATE UTILIZATION

A sound health strategy begins with the recognition of the right of the individual to live and work in a healthy environment, and to have access to an appropriate range of quality services. At the same time, these rights ought to be balanced with the individual's responsibility towards his or her society to participate in the development and maintenance of a healthy environment, and to utilize costly health care resources appropriately.

A health care strategy must emphasize health promotion and disease prevention, educating consumers in avoiding health hazards under their control. **A change in the pattern of utilization of health care services can only be realized by changing the attitudes, expectations, and lifestyle of the public through an educational process.**

There is a need for a more active part to be played by consumers, both in the planning of health care services generally and in shaping the type of care available. The public must, therefore, be provided with information on its health status, and made aware of the key determinants of health -- poverty, environment, housing, nutrition, and regional disparities -- to promote more relevant policy decisions.

The Royal Commission supports the principle of freedom of choice of health care professionals in serving the patient, and endorses their right to practice ethically and professionally. Control of access to health care services, however, falls principally on the health professionals; it is thus imperative that they recognize the obligation to be cost-effective in the treatment of patients. To this end, financial incentives should be introduced by government to encourage sound management practices and decision-making by health professionals, and to promote change in delivery and utilization patterns.

To further increase accountability, review of physicians' practice patterns must be combined with quality assurance and risk management programmes so as to reduce potential for liability for institutional or medical malpractice. To further involve the medical profession as a whole in reducing liability, the Royal Commission believes that it is essential to link hospital privileges and medical licensure with the ongoing review process of quality assurance and risk management.

CONCLUSION

The Nova Scotia Royal Commission on Health Care has proposed a **New Strategy** for the revitalization of health service delivery. Past reliance upon medical and institutional care has seriously constricted resources available for other, equally important aspects of health care, such as health promotion, disease prevention and community-based programmes. It has also hindered development of other forms of care that should be available to Nova Scotians, such as rehabilitative services, home care, palliative care, and pastoral care.

The evolution and orientation of the health care system has **not** kept pace with the changing patterns of demand of Nova Scotians. **More attention needs to be paid to health outcomes.** This, together with constraints on the province's financial resources, is threatening the continued provision of appropriate quality health care services to Nova Scotians.

The Royal Commission maintains that the level of funding allocated to the health care system is fully adequate for meeting the needs of the population. However, the **allocation** of these resources must be reassessed and re-directed in a more responsive and balanced manner. It has become clear to the Royal Commission that the Government of Nova Scotia can provide appropriate and quality health services in a fiscally responsible manner **only by adopting fundamental structural and administrative reform.**

In this Report, the Royal Commission has proposed **Guiding Principles** as a basis for its **New Strategy for Health.** The **New Strategy** establishes a definition of health which incorporates a comprehensive approach to health policy; structural and organizational changes involving broader levels of public participation; and extensive decentralization of the system placing decisions closer to the consumer. Policy and planning, human resource management, information systems, and the financial and budgetary process must form part of an integrated process and the basis of a renewed results-driven system, whose main objective is the **provision of quality and cost-effective health services to Nova Scotians.**

It is the Royal Commission's firm belief that by adopting the principles and measures proposed in the Report, the government and people of Nova Scotia will together fashion a truly comprehensive, responsive and efficient health care system, which will address their needs and those of generations to come.

SUMMARY OF RECOMMENDATIONS

A NEW PLANNING DYNAMIC

3.01 **That the Government of Nova Scotia formally adopt a broad definition of, and commitment to, health based on the principles of a Comprehensive Health Policy.**

3.02 That the Government of Nova Scotia, through the Provincial Health Council and Ministry of Health, develop Provincial Health Goals based on the principles of a Comprehensive Health Policy.

3.03 That the Ministry of Health disseminate, at periodic intervals, pertinent public information on health status and health surveys, so as to enable individuals and groups to make informed choices about health policies, programmes and options.

3.04 **That the Government of Nova Scotia immediately appoint a Provincial Health Council, which will report to the Executive Council, and provide advice to the Minister of Health.**

3.05 That the role of the Health Council be:

(a) to advise government on a Provincial Health Policy and Goals;

(b) to provide for broad involvement by the public in the development of a Comprehensive Health Policy; and

(c) to monitor, assess, and report on the performance of the health system.

3.06 That the Health Council immediately initiate a participatory process to develop Provincial Health Goals, which will form the basis for the province's Strategic Plan and all health service programmes.

3.07 **That the Government of Nova Scotia merge the Department of Health and Fitness, the Health Services and Insurance Commission, and the Commission on Drug Dependency into an integrated "Ministry of Health".**

3.08 That the Government of Nova Scotia transfer to the Ministry responsibility for the policy, analysis and research functions presently carried out by Maritime Medical Care Incorporated for Medical Services Insurance programmes, alter the contract with Maritime Medical Care Incorporated accordingly, and amend the legislation to remove specific reference to Maritime Medical Care Incorporated.

3.09 That the Government of Nova Scotia and Dalhousie University jointly establish, under the aegis of the Faculty of Health Professions, a Health Policy and Management Research Centre to undertake, on a contractual basis, health surveys, evaluations, research projects, and planning studies. The other Atlantic provinces should be invited to join in establishing and funding this centre.

3.10 That the Ministry of Health improve and update its information systems so as to provide a solid foundation on which to base policy development, comparative studies and evaluations.

3.11 That the Government of Nova Scotia emphasize human resource development. That it undertake a review of compensation policies for senior and middle management to ensure Nova Scotia can attract and retain the best possible health administrators.

3.12 That professional training and continuing education be provided so as to re-orient Ministry of Health personnel to health promotion and community development.

3.13 That the Health Council immediately appoint a task force to define new health regions for Nova Scotia, and report with its recommendations within two months of its appointment.

3.14 That the Government of Nova Scotia establish a Regional Health Authority for each of the regions defined by the task force of the Health Council, and appoint the boards of these Regional Health Authorities based on a public nomination process defined in consultation with the Provincial Health Council.

3.15 That the Ministry of Health immediately begin the administration of health programmes on the basis of these new regions by transferring to the Regional Health Authorities financial resources for the management of all health care services.

3.16 That, upon establishment of the new regions, the Ministry of Health provide each Regional Health Authority with the resources to hire a Chief Executive Officer and staff, and initiate delegation of the responsibility for the planning and management of all health programmes to these Regional Health Authorities.

3.17 That the Regional Health Authorities immediately initiate local needs assessments as a basis for the development of Regional Services Plans.

3.18 That the Ministry of Health establish a Regional Team within the Ministry to facilitate and support the development of Regional Health Authorities during a transition period of up to a maximum of five years.

3.19 That the Ministry of Health realign and reorganize all departmental information bases, including physician utilization and payment information, to conform with the new regions.

3.20 That the Ministry of Health support the establishment of the management information systems needed by the Regional Health Authorities for regional planning, including workload measurement systems for nursing and the associate health professions.

3.21 **That the Government of Nova Scotia immediately establish, under the aegis of the Cabinet Secretariat, a committee to strengthen inter-departmental coordination on health-related issues at the senior government level. This committee should consist of relevant ministers, deputy ministers and supporting resources.**

3.22 **That the Province of Nova Scotia act jointly with the Provinces of New Brunswick and Prince Edward Island to create a Maritime Provinces' Health Secretariat to coordinate policy and health initiatives for the Maritimes, with the Province of Newfoundland consulted as appropriate.**

3.23 That the Province of Nova Scotia participate in and financially support the formation of a national agency which would coordinate and cooperatively pursue health technology evaluation and research.

3.24 That the Province of Nova Scotia request Dalhousie University, in cooperation with the Council of Maritime Premiers, to appoint a task force with the mission to develop the precise representation and specific terms of reference for the establishment of a Health Faculties Board within the organizational framework of the University.

HEALTH PROFESSIONS

4.01 That the Ministry of Health in consultation with the Health Council develop a comprehensive health human resources plan based on health needs of the population and a review of the present and future roles of all health professionals to determine appropriate entry points to the health system, numbers, mix, training, scope of practice and distribution of health professionals in Nova Scotia.

4.02 That new modes of delivery for the services of all health professionals be explored, including expansion of the roles of the professions and entry points to the health system, non-institutionally based delivery of care, and shared service models to achieve a cost-effective mix of health personnel. That appropriate legislation be enacted to allow flexibility in the delivery of specific health services by all the various health professions.

4.03 That the Ministry of Health place the utmost priority on the planning of nursing human resources. Further, that the coordination of nursing human resources planning be ensured through the development of a comprehensive information base at the provincial and institutional levels.

4.04 That the Provincial Health Council evaluate the role of the Certified Nursing Assistant.

4.05 That the Provincial Health Council oversee the development and implementation of the following measures with respect to nurses:

(a) Job enhancement initiatives to be funded by the Ministry of Health.

(b) Organizational structures providing unit managers with the authority to allocate human and financial resources and that encourage participatory management on a unit and facility-wide level.

(c) Options allowing for greater flexibility and individual control over scheduling, such as "flex" time, job sharing, leaves of absences, extended parental and education leaves, and deferred salary leaves.

(d) Guidelines for a clinical ladder structure as the basis for a salary grid that provides financial compensation consistent with clinical expertise, levels of responsibility and variations in work conditions.

(e) Impact analysis of all new programmes and services to assess increased demands on nursing services and the commensurate financial implications.

4.06 That the Provincial Health Council initiate a demonstration project in a health institution based upon the principles of participatory management and a collaborative team approach to the delivery of patient care. Participants on this project should include representatives from the unions representing nurses, employers, university nursing programmes, the Registered Nurses Association of Nova Scotia, staff physicians and staff nurses, who will be responsible for the design and implementation plan. This demonstration project, which should operate approximately 18 months, should be evaluated every six months.

4.07 That the Provincial Health Council make recommendations on the following areas within a six month time frame:

(a) Implications of entry requirements to practice for nurses.

(b) Definition of career and remuneration structures within nursing that recognize and compensate for expertise in administration, teaching, research and clinical practice.

(c) Accessibility to and financial support for continuing education through distance learning, university and institutional programmes.

4.08 That the Ministry of Health budgetary guidelines for hospital staffing be updated to provide funding for inservice programmes, orientation, vacations, educational leaves and staff replacement time; that hospital funds be designated for continuing education; and that specific programmes be developed to strengthen management skills of nurses.

4.09 That the policy and administrative framework for an expanded role for nursing in the delivery of primary health care in Nova Scotia be established. That this process involve collaboration of nurses and other health professionals, administrators, government and educational institutions.

4.10 That the Provincial Health Council develop an interdisciplinary demonstration project which expands the role of nurses to provide primary health care in a community setting, with delivery of services based on a team approach; and that an 18-month time frame be set, with ongoing evaluation.

4.11 That, in view of the projections of increased physician human resources and their implications on medical services insurance expenditures, the Ministry of Health place the utmost priority on physician human resources planning strategies, working in consultation with key groups.

4.12 **That the Ministry of Health, in keeping with the recommendations of the physician human resource management strategy, establish targets for physician numbers, in total and by specialty, commensurate with the Provincial Health Strategy. That the necessary measures required to achieve these targets, including reductions in enrolment and immigration, be immediately implemented.**

4.13 That the Ministry of Health determine regional requirements for physicians, including appropriate mix of specialties, in keeping with the principle of regionally-based planning. This regional planning will be based on demography and health status indicators, within provincially-established guidelines.

4.14 That, given the national market for physicians, and the large annual inter-provincial flows of physicians, the Ministry of Health continue to work towards a federal-provincial agreement to bring about a general reduction in the rate of growth of numbers of physicians in Canada.

4.15 That the Government of Nova Scotia work towards a reduction in total undergraduate medical school enrolment in Canada of 25 per cent. Further, that the Dalhousie Faculty of Medicine share the national burden of reduction on a proportional basis, taking into consideration its recent enrolment reductions. That alternate funding mechanisms for the Dalhousie University Faculty of Medicine, other than the per capita formula, be developed.

4.16 **That medical staffs of community, regional and tertiary care hospitals be established at a level appropriate to the service roles established in the Regional Services Plans.**

4.17 **That any growth in an institution's medical staff be based on Regional Services Plans and regional human resources planning, be subject to impact analysis, and receive both Regional Health Authority and Ministry of Health approval.**

4.18 **That so as to regulate the supply and geographic distribution of physicians, the government of Nova Scotia immediately take steps to restrict new Medical Services Insurance billing numbers issued to physicians performing insured services in this province.**

4.19 That the Government of Nova Scotia introduce a mixed system of remuneration for physicians, including fee-for-service, salary and capitation methods of payment.

4.20 That the Government of Nova Scotia develop the administrative framework and establish alternate settings for the practice of medicine, such as health service organizations and community health centres.

4.21 That a task force of the Provincial Health Council be established to undertake a comprehensive review of the fee-for-service schedule. This review will seek ways to adjust the schedule to support health maintenance, health promotion and illness prevention.

4.22 That the Government of Nova Scotia establish payment to full-time institutionally-based physicians, namely pathologists, radiologists, and anesthesiologists, on a salary or sessional fee basis.

4.23 That the Government of Nova Scotia adopt a managed growth strategy, with well-defined objectives, in order to achieve an orderly growth of provincial expenditures for physicians' services.

4.24 That the Ministry of Health establish the administrative structure for a prospective capitation payment system for physicians' services based on the defined regions, prior to entering another round of negotiations.

4.25 That the Ministry of Health establish a Clinical Services Fund to be administered by the proposed Health Faculties Board as the basis for block funding the patient care services provided by full-time teaching physicians, so as to allow for better management of physician supply and public expenditures.

4.26 That clinical heads within institutions be provided with financial incentives for their administrative and managerial responsibilities, and that physicians be encouraged and provided with appropriate incentives to manage health care resources efficiently.

4.27 That the Government of Nova Scotia, in conjunction with the other Atlantic provinces and the universities involved, establish enrolment targets that recognize demonstrated regional needs, as well as national and international interest in educational programmes for the associate health professions.

4.28 That the Government of Nova Scotia develop training programmes for and expand the use of auxiliary personnel for rehabilitation services such as physiotherapy and occupational therapy. Specific training requirements, service functions and supervisory conditions must be determined as preliminary steps.

4.29 That the Ministry of Health review and plan for an appropriate supply of the associate health professions; that salary scales be examined and revised, and career structures created for the associate health professions, so as to reflect seniority, responsibility and educational attainment.

4.30 That worklife conditions of the associate health professions be addressed in order to reduce the loss of professionals through attrition, inactivity and job dissatisfaction through the provision of options allowing for greater flexibility, such as "flex" time, job sharing, leaves of absences, extended parental and education leaves, and deferred salary leaves.

4.31 That workload measurement systems be established so as to ensure appropriate staffing levels for the associate health professions.

REVITALIZED SERVICES

5.01 That the Ministry of Health reallocate non-transferable resources to foster the development of health promotion and community-based programmes based on a comprehensive health policy:

(a) That community health programmes receive an increased budget allocation equal to one per cent of the budget of the Ministry of Health in each of the next five years; and that this reallocation take place in a planned manner, allowing for the development of the administrative capacity to implement such programmes.

(b) That the Ministry of Health establish a community health initiatives fund in support of health promotion and illness prevention projects at the community level. This fund, to be regionally administered, will consist of $1 per capita per annum and have a five year life span.

5.02 That the following steps with respect to the Coordinated Home Care Programme be taken:

(a) development of an evaluation process which includes measurement of programme effectiveness;

(b) a review of the human and fiscal resources allocated to the Department of Community Services and the Ministry of Health for Coordinated Home Care;

(c) the expansion of target groups and eligibility criteria to address acute health care needs of all age groups, including the terminally ill; and

(d) coordination of Home Care with acute and chronic institutional services, including early discharge programmes.

5.03 That the guidelines established by the Canadian Council on Hospital Accreditation with respect to pastoral care services be met by all hospitals in Nova Scotia; that provision for appropriate clinical pastoral care be made through regionally-administered health services budgets; finally, that human resource planning and management be done in collaboration with the Institute for Pastoral Training.

5.04 That a review be undertaken by the Ministry of Health and the Provincial Health Council to ensure the completeness of rehabilitation services in the institutional, community, and home settings.

5.05 That palliative care programmes be recognized as integral components of health services at the tertiary, regional and community levels; that upon assessment and admission to a palliative care programme, an individual be eligible for all required medication, supplies and services as a part of the insured health services in any institutional, community or home setting approved by a physician.

5.06 **That the range of services for mental health provided by the Ministry of Health be significantly broadened beyond the institutional services which presently dominate the mental health budget; and that additional administrative and staffing resources be provided to support this expansion.**

5.07 That the name of the Psychiatric Mental Health Division be changed to Mental Health Division to emphasize this new, broadened focus.

5.08 That the Ministry of Health conduct a major evaluation of psychiatric outpatient services provided by hospitals and mental health centres.

5.09 That until such time as there are sufficient Canadian-trained psychiatrists, the Ministry of Health make a concerted effort to recruit American-trained psychiatrists and respond immediately to the manpower requirements in child psychiatry.

5.10 **That the Ministry of Health allocate resources for improved facilities, new locations and a more supportive environment for drug and alcohol rehabilitation programmes, so as to enhance programme delivery and reduce barriers to programme entry.**

5.11 That all hospital-based drug and alcohol rehabilitation programmes be structured so as to maximize federal contributions from sources such as the Vocational Rehabilitation for Disabled Persons Agreement.

5.12 That drug utilization reviews be expanded in order to reduce over-medication and that better information and drug education be provided to physicians.

5.13 That the Ministry of Health eliminate the actual acquisition cost method of payment, and mandate a lowest-available price-product system for the Pharmacare Programme.

5.14 That a public information and consumer awareness campaign be implemented to increase knowledge regarding prescription and over-the-counter drugs, particularly with respect to their side-effects, interactions and reactions, as well as substitutes and cost.

5.15 That the Ministry of Health develop a patient card computer-linked system to monitor drug utilization, cost, and increase efficiency of the claims processing and accounting functions.

5.16 That the Pharmacare Programme coverage be uniformly extended to Nova Scotians on social assistance and that criteria be developed for further expansion of the programme to Nova Scotians confronted with "catastrophic" drug costs.

5.17 That the Provincial Health Council provide advice on emergency medical services, including operational standards for ambulances, training and certification of attendants, guidelines for use of emergency and non-emergency patient transfer, and equipment.

5.18 That standardized programmes of training for Emergency Medical Attendants which meet the accreditation standards of the Canadian Medical Association be developed immediately and phased-in to apply to existing and future ambulance attendants within two years.

5.19 That greater efficiencies and better management of utilization be achieved by eliminating duplicate areas of service by private operators; by provincially coordinating transfers between institutions; and by establishing a hospital "shuttle" system for transferring patients in urban areas.

5.20 That an appropriate information system be developed and implemented to improve the ability to manage ambulance services.

5.21 That a comprehensive review and evaluation of ambulance services be conducted in two years by the Health Council, so as to examine progress made, and to recommend possible future changes to the delivery system.

5.22 That a standing committee of the Health Council collect, analyze and disseminate information on the appropriate use and types of health technology to be available as insured services in the province. Further, that the Ministry of Hhealth rationalize the use of technology based on these evaluations.

5.23 That the Ministry of Health not provide payment to hospitals or physicians for services using unapproved technology.

5.24 That clinical guidelines and protocols for the use of specific health technologies be developed by the Health Council.

FINANCING THE HEALTH CARE SYSTEM

6.01 That the Government of Nova Scotia join with the other provinces and urge the federal government to re-examine the Established Program Financing Act so as to achieve a clearer policy and financing framework. That the Government of Nova Scotia, together with the other provinces, urge the federal government to reassess the impact of its decreasing share of provincial health care expenditures and review the consequent implications for maintaining the integrity of the Canada Health Act.

6.02 While the future of the Established Program Financing Act is being reassessed, that the Government of Nova Scotia, together with the other provinces, request that the federal government provide technical and advisory resources in areas of inter-provincial scope, such as physician human resources planning and technology assessment, to allow for coordination on issues of national importance.

6.03 That effective planning, financial management, and accountability of the health care system be strengthened in view of projected demands on the health care system and of the provincial economic climate. That targeted levels of health spending be established globally and for individual programmes within the health budget.

6.04 That government approach expenditures on health care strategically, and weigh health spending in relation to other social and economic programmes which have an impact on health status.

6.05 That fee negotiations with physicians be coordinated with the provincial government financial planning process. That officials from Management Board and the Department of Finance form part of the government's negotiating team.

6.06 That the Government of Nova Scotia establish a dedicated tax on alcohol and tobacco with revenues designated specifically to drug and alcohol rehabilitation programmes.

6.07 That the Ministry of Health recover a more equitable share of costs for tertiary care services from the other Maritime provinces.

6.08 That the Government of Nova Scotia decentralize the funding structure for health care expenditures to the Regional Health Authorities.

6.09 That the Ministry of Health establish appropriate information and financial management systems to allow for a population-based regional funding system.

6.10 That a three-year budget cycle be introduced into the health care financial management system to enable effective long-term planning of health programmes.

6.11 That each Regional Health Authority develop its Regional Services Plan, which will define the role and function of all institutions within its region.

6.12 That the Ministry of Health develop incentives to promote alternative settings and payment for primary care services provided by physicians and other front-line health professionals, such as community health centres and health service organizations.

6.13 That the Regional Health Authorities consider the expansion of the roles of Community Hospitals as primary care facilities.

6.14 That a task force of the Provincial Health Council, composed of representatives from the Ministry of Health, the Nova Scotia Association of Hospital Organizations, and each Regional Health Authority, be established to recommend revisions to the hospital funding system, taking into account the principles outlined above.

6.15 That the Ministry of Health participate in inter-provincial studies to develop a model for funding hospitals on an output basis.

6.16 That the establishment of the Victoria General Hospital as a distinct, independent organization, subject to the same rules and regulations as other hospitals in the province, be accelerated and that the Nova Scotia Hospital be similarly established.

6.17 That all government-owned hospitals employ nominating procedures for the appointment of directors that are similar to and consistent with the procedures in use at the other hospitals in the province.

6.18 **That the Hospital Construction Programme and Committee be disbanded and that a freeze be established on all capital construction, major capital equipment acquisitions, and new programmes until the Provincial Health Strategy and Regional Services Plans have been established.**

6.19 That the indirect costs of teaching be explicitly incorporated into the new hospital funding formula.

6.20 That the internship and practicum components of the education of health professionals be extended to the regions.

6.21 That the Provincial Health Council appoint a task force to make recommendations with respect to:

(a) an appropriate reduction in the number of beds in the Halifax hospitals reserved for teaching medical students; and

(b) the extension of hospital privileges to general practitioners in the community.

6.22 That the Ministry of Health increase public education programmes to provide people with information on health status, healthy behaviour and lifestyles, and costs of health care, to encourage a sense of public stewardship of valuable health resources.

6.23 That the Ministry of Health devise educational strategies aimed at all health professionals to promote more efficient management of health care resources. Further, that health professional education incorporate a managerial component into all programmes.

6.24 That the Ministry of Health require all health care institutions and homes for special care to implement quality assurance and risk management programmes.

MUNIT HAEC ET ALTERA VINCIT

THE REPORT

OF THE NOVA SCOTIA ROYAL COMMISSION ON

HEALTH CARE

Towards a New Strategy

December 1989

The Complete Report of
The Nova Scotia Royal Commission on Health Care
consists of the following:

- **Summary of the Report**
- **Report of The Nova Scotia Royal Commission on Health Care Towards a New Strategy**
- **Research Studies, Volumes I, II & III**

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The Right Reverend
G. Russell Hatton
Commissioner

Edward M. MacNeil
Commissioner

THE NOVA SCOTIA
ROYAL COMMISSION ON
HEALTH CARE

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F.R.C.P.(C), F.A.C.C.
Commissioner

George L. White LL.B.
Secretary and Legal Counsel

December 8, 1989

The Honourable Lloyd R. Crouse, P.C.
Lieutenant Governor of Nova Scotia

Sir,

Pursuant to the instructions given to us by Order-in-Council of the twenty-fifth day of August, 1987, we the undersigned are pleased to transmit herewith the Report of the Royal Commission on Health Care.

It is our hope that this Report will provide the people of Nova Scotia with a strategy to manage and enhance their health care resources in the years to come.

We have the honour to be your obedient servants.

J. Camille Gallant
J. Camille Gallant
Chairman

Sharon Marshall
Sharon Marshall
Commissioner

+ G. Russell Hatton
The Right Reverend
G. Russell Hatton
Commissioner

Earle L. Reid
Commissioner

Edward M. MacNeil
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Commissioner

George L. White
Secretary and Legal Counsel

TABLE OF CONTENTS

LETTER OF TRANSMITTAL iii

EXECUTIVE SUMMARY vii

PREFACE ix

CHAPTER I TOWARDS A NEW STRATEGY 1

Introduction 1
1. Health Policies Oriented to Healthy Outcomes 2
2. Participation of Citizens 3
3. Decentralization and Regionalization 3
4. Accountability 4
5. Matching Resources to Local Health Needs 5

The Next Steps 7

CHAPTER II IMPERATIVES FOR CHANGE: THE NOVA SCOTIA REALITY 11

Introduction 11
1. Provincial Health Care Expenditure Patterns 11
2. Impacts of Health Expenditure on the Provincial Economy 15
3. How the Health Care Budget is Spent 16
4. Economic Environment 28
5. Federal-Provincial Funding 30
6. Health Status 32
7. Demographic and Societal Changes 39
8. The Need for Change 41

CHAPTER III A NEW PLANNING DYNAMIC 43

Introduction 43
1. Comprehensive Health Policy 44
2. Health Council 45
3. The Ministry of Health 47
4. Regional Health Authorities 51
5. Intersectoral Coordination 56
6. Inter-Provincial Coordination 57
7. Health Faculties - Dalhousie University 58

Implementation Schedule 60

CHAPTER IV HEALTH PROFESSIONS 63

Introduction 63
1. Nurses 65
2. Physicians 77
3. Associate Health Professionals 93
Implementation Schedule 99

CHAPTER V REVITALIZED SERVICES 103

Introduction 103
1. Community Health Programmes 105
2. Coordinated Home Care 108
3. Institutions 109
4. Further Related Services 109
5. Mental Health Services 111
6. Drug and Alcohol Rehabilitation Programmes 113
7. Pharmacare Programme 115
8. Ambulance Services 117
9. Health Care Technology 119
Implementation Schedule 122

CHAPTER VI FINANCING THE HEALTH CARE SYSTEM 125

Introduction 125
1. Financial Management 128
2. A More Equitable Funding Structure 130
3. Institutions 132
4. Education of Users and Providers on Appropriate Utilization 141
Implementation Schedule 144

CHAPTER VII CONCLUSION 147

RECOMMENDATIONS 148

APPENDICES 163

A Order-in-Council 163
B Royal Commission Secretariat 165
C References 166
D Glossary 170
E Research Studies 175

EXECUTIVE SUMMARY

The Report of The Nova Scotia Royal Commission on Health Care calls for the development of a **New Strategy** that is more appropriately aimed at improving the health of Nova Scotians. The Royal Commission's examination of the Province's economic climate, societal expectations, and the health status of the population points to an urgent need to restructure the planning of health programmes so as to develop more effective health services. In making its recommendations, the Royal Commission was guided by five principles, which it believes form the basis for a revitalized health care system. These principles are: **Health Policies Oriented to Healthy Outcomes, Participation of Citizens, Decentralization and Regionalization, Accountability,** and **Matching Resources to Health Needs.**

So as to realize a realignment of the health care system in keeping with these principles, a policy and planning framework is proposed. **A New Planning Dynamic** calls for a more comprehensive approach to health policy formulation. The creation of a **Provincial Health Council**, allowing for greater participation and openness of the planning process, is recommended. A reorganized **Ministry of Health** will consolidate and integrate the various government agencies involved in health services, and allow for streamlined management and operations. A key principle upon which this Report rests is that of administrative delegation to regions. An extensive **decentralization** and **regionalization** of the health system to **Regional Health Authorities** should render health care services more sensitive and responsive to local needs and priorities. Mechanisms for improved coordination between government departments and among the Atlantic Provinces are also put forward. The establishment of a multi-disciplinary, university-based **Health Policy and Management Research Centre** is essential for a revitalized policy and planning effort and a key step for coordinating research in health policy between government and the research community. A **Health Faculties Board** to coordinate the educational, human resource, and funding requirements between Dalhousie University and the Maritime provinces is proposed.

The importance of ensuring an adequate supply, mix and training of **Health Professionals** is fundamental to the **New Strategy** and will require careful planning. The **Strategy** will call for a new type of health professional who can rise to the challenge of providing high quality health services in the most cost-effective manner. The shift to community-based care and new points of entry will require a review of the role of health professionals in a revitalized health system, and creative deployment of these human resources. A large part of this chapter centres on questions related to the supply, education and worklife of nurses and associate health professionals. Measures to control the supply of physicians are recommended for immediate implementation in view of the fact that growth in the numbers of physicians is outpacing population growth by a factor of four to one.

Mechanisms to manage growth of expenditures on physicians' services are also elaborated.

Revitalized Services examines ways of providing Nova Scotians with a full range of health services, in terms of integration and comprehensiveness. Steps to improve the efficiency of health service delivery, so as to achieve specific and tangible health results, are put forward. A better balance between the curative and preventive components of the health system is recommended, as is a shift from institutional to more community-based services. The importance of community-based health promotion and illness prevention programmes as a means of improving the health status of Nova Scotians is emphasized. Selected health programmes are examined in the light of the Royal Commission's guiding principles. Finally, it is suggested that major decisions with respect to health care technology must be made in a participatory forum so as to determine the type and scope of health services Nova Scotians wish to obtain for themselves. The social and ethical implications of these decisions must be fully debated.

The Report concludes with a discussion of measures for enhancing the financial management of the health sector. **Financing the Health Care System** examines the provincial economy and proposes steps to government for improving controls on health expenditures. A new **population-based, regional funding structure**, which would allow for better management and more equity in the health system, is elaborated.

PREFACE

On August 25, 1987, the Nova Scotia Royal Commission on Health Care was established by Order-in-Council. The Royal Commission was directed to "inquire into and make recommendations to the Governor in Council with respect to health care and, without limiting the generality of the foregoing," to:

- Examine present costs of the health care delivery system and recommend efficiencies which may be adopted to reduce costs while maintaining the effectiveness of the present programmes without imposing hospital user fees or direct charges for physicians' services;

- Examine the rates of increases in the costs of health care, including hospital care, medical services insurance, ambulance services, community health and drug dependency programmes, and to the extent possible identify the reasons for such increases;

- Examine duplication of services and recommend methods to improve efficiencies;

- Assess the present and future physician manpower requirements of the province;

- Assess administrative efficiencies of hospitals and make recommendations respecting alternative practices which would permit optimum efficiency in the hospitals and hospital system of the province; and

- Assess the costs incurred by teaching hospitals in respect of their responsibilities to medical schools and students.

The Royal Commission began its work in October, 1987. The Royal Commission adopted a broad interpretation of its mandate and divided its activities into three streams: **Public Hearings**, **Research**, and **Consultations**. From the beginning, the Commissioners realized the importance of placing their work solidly in the context of current trends — local, provincial, national and international, — in health care delivery and adopted a participatory approach throughout the three streams of activity.

To ensure the validity and thoroughness of its research process, the Royal Commission assembled a staff of administrative and research personnel with a sound knowledge of public policy and health care issues. The Royal Commission Secretariat was headed by **Martine Durier-Copp, Ph.D**. Dr. Durier-Copp had previously been a member of the Federal Government's Task Force on Canada's Official Development Assistance Programmes. She had also served as programme director and advisor for the Canadian Red Cross, the American Red Cross and

U.N.I.C.E.F. **Thomas G. Regan, Ph.D.**, of the Sociology Department of Acadia University, served as Chief of Research. Dr. Regan, a lecturer on the social dimensions of health and health care, brought to the Royal Commission his experience as both a researcher and a volunteer with several health organizations. The late **Byron D. Anthony**, former Deputy Minister of Management Board, and **F. Winfield Hackett, LL.D.** played key roles as Special Advisors to the Royal Commission. (A complete listing of the Royal Commission Secretariat is contained in Appendix B.)

The Royal Commission began its work by speaking with the people of Nova Scotia. In February, 1988, a call for submissions appeared in all provincial newspapers and more than 2,700 information packages about the Public Hearings were sent to voluntary organizations, physicians, nurses, unions, health care organizations, professional associations, business groups, and interested citizens across the province.

Public Hearings were held throughout the province between April 21 and July 13, 1988. A total of 338 submissions were received prior to the writing of the Final Report. The submissions and transcripts of the Hearings were synthesized into a summary entitled **Issues and Concerns**, published in October, 1988. The complete index of all who participated in the Public Hearings process is published as Appendix "D" of **Issues and Concerns**.

Publication of **Issues and Concerns** concluded the **Public Hearings** and the Royal Commission then entered its **Research Phase**. The research areas identified by the Royal Commission were divided into three broad categories:

- Economic, Epidemiological, and Demographic Information;
- Health Services Administration, and
- Health Policy and Planning.

Representatives from the health sector were invited to attend sessions at which issues and options raised by the Royal Commission's research were discussed. The opinions and reactions of the participants in these sessions formed a significant part of the consultative process.

In addition to the in-house research undertaken by Royal Commission staff, the Institute for Health Care Facilities of the Future; Gardner Pinfold Consulting Economists; Canmac Economics Ltd.; Case Mix Research, Queen's University; Stevenson Kellogg Ernst & Whinney; the Nova Scotia Working Party on Physician Manpower Planning; the Nova Scotia Advisory Committee on Human Health Resources; Doane Raymond; and MacLean Hospitality Consultants Ltd. undertook studies on the Royal Commission's behalf. These studies are published in supplemental volumes as the **Research Studies of the Nova Scotia Royal Commission on Health Care**.

An extensive series of **Consultations** undertaken by the Royal Commission formed the third phase of its work. The Commissioners invited health care experts to participate in their seminars, travelled to other provinces, the United States and Europe and attended a number of major health policy conferences. In March, 1989, the Royal Commission joined with members of both past and present commissions on health care in Canada to compare views on health care trends across the country.

The three streams of research were consolidated in July, 1989 at a Policy Finalization Session. Leaders in health policy analysis from across Canada and Europe met with the Royal Commission and its staff, reviewed its findings, and provided guidance in the formulation of the Royal Commission's final recommendations.

This document is the product of an exhaustive analysis of the Nova Scotia health care system undertaken by the Royal Commission. It is the Royal Commission's belief that this Report constitutes an important step in the evolution of our health care system from the foundations laid by the Hall Commission Report in 1964. A blueprint for the continued evolution of the health care system into the next century is proposed.

Acknowledgements:

The Royal Commission on Health Care thanks all those who contributed to this Report: presenters, participants in workshops and consultation sessions, officials of the Government of Nova Scotia, members of other provincial governments across Canada, and all who made available their time and insights to the work of this Royal Commission. The Commissioners acknowledge and thank the Premier's Commission on Future Health Care for Albertans for sponsoring the inter-provincial conference of health commissions.

The Royal Commission particularly expresses its gratitude to the advisors who assisted during its deliberations and who participated in the Policy Finalization Session: Dr. Martin Barkin, Deputy Minister, Ontario Ministry of Health; M. Roger Bertrand, *vice-président, La Commission d'enquête sur les services de santé et les services sociaux* (Rochon Commission), Québec; Dr. Maureen Dixon, Director, The Institute of Health Services Management, London, England; Dr. John R. Evans, Chairman, Ontario Health Review Panel; Dr. Robert Evans, Department of Economics, University of British Columbia; and Mr. Laurie McMahon, Director, Office for Public Management, London, England. Special thanks are also extended to Mr. Eugene Blyskis and Ms. Gail Paech of Coopers & Lybrand, Toronto, for the expert advice and in-depth knowledge of the Canadian health care system which they contributed to this review.

CHAPTER I
TOWARDS A NEW HEALTH STRATEGY

INTRODUCTION

Nova Scotians are generally satisfied with their health care system. While cognizant of this fact, government has noted that health care constitutes the single largest expenditure in the Nova Scotia provincial budget. As outlays on health care continue to increase, resources available for other social and economic programmes have become scarcer. In view of these budgetary tensions, The Nova Scotia Royal Commission on Health Care was appointed to inquire into and make recommendations to the Governor in Council, with respect to health care.

In view of the magnitude and complexity of the health care system, it was clear that an inquiry based on a narrow perspective focusing on cost alone would not suffice. The Royal Commission began its work firmly committed to the principle of a broad review of the health system encompassing a wide range of issues that drive it, including past trends and future projections. In the Royal Commission's view, health spending must be approached as an appropriate economic investment yielding high dividends in terms of productivity and societal well-being. The broad social and economic dimensions of health have necessitated the comprehensive approach reflected in this Report.

The Royal Commission believes that the Province's health policy must be aimed at improving the health of Nova Scotians. The current fiscal situation, the health status of the population, and expectations of unlimited resources all point to an urgent need to develop effective health policies and innovative systems of health care delivery. Social change will increase demands on many of the province's social programmes and will require improved planning and coordination of policies and resources so as to continue to provide adequate levels of service. In this context, coordination of health policies with other social programmes is critical.

It is not possible to consider future costs of health services in the absence of a vision of what the health system should provide to Nova Scotians. To help focus its inquiry, the Royal Commission embraced a philosophy that espouses the inherent value and worth of each individual. It is the Royal Commission's fundamental tenet that every Nova Scotian is entitled to realize his or her full physical, mental, and spiritual potential. The federal and provincial governments must remain committed to the principle of a universal health system that is publicly funded in order to assist each and every person to achieve a full and healthy life.

All recommendations in this Report are directed at this emphasis on the individual as the underlying basis of a publicly funded health system, from strategic planning to the provision of patient care services. The Royal Commission's philosophy is founded on the following **guiding principles** that it contends must form the basis of a new health strategy for Nova Scotia:

Guiding Principles

- **health policies oriented to healthy outcomes;**
- **participation of citizens and providers of health services in the planning and management of the health system;**
- **decentralization and regionalization;**
- **accountability for the prudent use of limited resources; and**
- **matching resources to health needs.**

The remainder of this Chapter sets forth these principles.

1. HEALTH POLICIES ORIENTED TO HEALTHY OUTCOMES

The Royal Commission advocates an approach to health care that views the individual as a whole person, focusing on the spiritual and mental, as well as the physical aspects of well-being. The ultimate goals of the health system are to maintain individual well-being and advance the health of society as a whole. To achieve these goals in ways that get the most out of available resources, the province must invest in information systems that measure the results of its health policies.

Health care is but one of the Province's social programmes. The Royal Commission maintains that expenditures on health care must not expand at the expense of other essential programmes. Adopting a comprehensive approach to health policy should help foster a better balance between the growth of health expenditures and the demands of other social programmes which also contribute to the health status of Nova Scotians.

Collective action to improve health must be aimed at both personal lifestyle and environmental conditions. Individuals can alter their lifestyles and should be educated and encouraged to do so. But a Comprehensive Health Policy must go beyond these measures to address social and environmental factors over which individuals have little direct control. The two are often correlated. Because socio-economic factors are among the most important determinants of health status, the poor are more likely to get sick and respond to treatment less satisfactorily.

A new health strategy that is intent on promoting good health will require a new balance within the health care system itself. Not only must greater emphasis be placed on health promotion and illness prevention, but delivery systems must be reorganized to place greater reliance on non-institutional and ambulatory models, where care can be shifted to home and community settings. Such a restructuring of the health system can only succeed if built on a better understanding of precisely what the system is achieving. A new health strategy will therefore require constant analysis of the determinants of health and of the population's health status as well as evaluations of the efficiency and effectiveness of health programmes.

Current information systems rely extensively on existing mortality and institutional morbidity data as principal indicators of health status. These data provide insights only into death and illness. Since much happens to individuals between the stages of "good health" and the onset of conditions requiring medical care, data concerning public health must be collected in order to identify people's needs prior to requiring medical or hospital services. The **Report of the Panel on Health Goals for Ontario**[1] estimates the cost of conducting a survey of public health every three years as roughly the equivalent to the cost of maintaining one acute-care bed in a teaching hospital over the same period. When considered in these terms, we can ill afford the cost of not obtaining the types of information appropriate for assessment, planning, and decision-making.

2. PARTICIPATION OF CITIZENS

The population at large shares the responsibility for wise use of limited health resources. The best way to mobilize people to accept a sense of stewardship of the health system is to empower them to act on health issues, both individually and collectively.

Personal empowerment positions the individual to act on health issues. This process begins with the dissemination of information on health status, healthy behaviour and the cost of health care. Such information is a key factor in allowing people to accept individual and collective responsibility for health choices. By exercising one's own control over these choices, individuals can become partners with health professionals in both the planning of health care and the treatment process.

Collective empowerment enables interested parties to become involved and to help decide what type of health system is required and which health technology is appropriate for their needs. Such involvement encourages commitment, and it is this commitment of people to the continued improvement of their health and health services that is needed.

Broad-based participation will only occur when planning and decision-making occur closer to the beneficiaries of health programmes. The principle of empowerment forms the basis of decentralized decision-making and the development of regional structures for the delivery of health programmes.

3. DECENTRALIZATION AND REGIONALIZATION

A key guiding principle of the Royal Commission is the dual concept of decentralization and regionalization. **Regionalization** involves the adaptation of a network of services to the needs of a region, and **decentralization** further entails delegation of responsibility and authority to regional bodies.

---

[1] Ontario Panel on Health Goals, **Health for All Ontario: Report of the Panel of Health Goals for Ontario** (Toronto: 1987).

The administration of the system must devolve to allow greater participation of citizens and health care providers in the planning and management of health resources. Centralization of these functions inhibits meaningful participation. Government must recognize that it is not able to deal directly with the many and varied peripheral decisions required within the system. It has neither the necessary specific or local knowledge, nor the capacity for responding quickly enough to local needs in order to manage all aspects of health services.

Decentralization will place operating authority in local hands. The Royal Commission maintains that all health programmes should be planned and managed by Regional Health Authorities, within clear guidelines established by the provincial government. Regional priorities should be decided through a participatory process, taking into consideration the experiences, needs and views of local communities, health care providers and agencies.

A move to Regional Health Authorities will necessitate significant changes within the health system. The region must become the focal point for planning health care. While not replacing hospital and agency boards, Regional Health Authorities will become the principal partners with government to ensure that appropriate services are provided in each health region.

If the delegation of authority to the regions is to be successful, competent managers and extensive public input will be needed. Maintaining and improving the level of management competence will require selecting individuals with the appropriate skills for specific tasks. Public input at the community level will require the time and energy of many volunteers. Government, the public, physicians and other health care provider groups must be committed to these changes. This commitment can be stimulated by the government by means of openness and the willingness to act in response to local initiatives in a flexible and co-operative fashion.

4. ACCOUNTABILITY

An emphasis on decentralization and broad participation in planning and managing the health system necessitates a high degree of accountability of those to whom government delegates authority. The primary mandate of government with respect to health should be to provide the overall direction of the health system. However, long-term strategic planning which addresses the full range of care, must be undertaken in consultation with those who have professional or community interests. This province-wide planning process must begin with health goals and measurable objectives as the basis for regional accountability for managing limited provincial resources.

Information and evaluation are essential to management concerned with results. An information system must be developed to provide comparative data and analysis of operations as well as more general information dealing with population characteristics and needs. This information must not only be applied for the purpose of central planning of the health care system by government, but must also be available to the health constituency for use at the regional planning level. Bringing information and evaluation results into the public forum will serve to make the health care system more accountable for its performance.

In order to assess the efficiency of the health system, new methods must be found for evaluating the relationship among local health needs, the use of available resources, and the results of health programmes. Such an evaluation effort will result in a stronger capacity for basic programme monitoring. The health care system needs to strengthen its ability to characterize patients, programme participants, programme activities and services, as well as to document the results of its programmes.

Effective management must not, however, be limited to administrators and bureaucrats. Accountability and coordination will be strengthened by providing health care professionals with opportunities to participate in planning and management. Financial incentives should be used to advance sound management practice and professional decision-making, with respect to the way in which health services are offered and used.

5. MATCHING RESOURCES TO LOCAL HEALTH NEEDS

A new health strategy will strengthen the relationship between available resources and health needs of the population. If the Nova Scotian health system is to be efficient and genuinely concerned with the consequences of its programmes, changes must occur in the delivery of health services, the deployment of health personnel, the use of technology and the allocation of capital and financial resources.

Health Services

The Royal Commission's approach to health care has focused on all aspects of health as well as on the continuity and coordination of services at both the programme and individual levels. The Royal Commission maintains that health services must include a full range of programmes directed at the promotion and maintenance of health, the treatment of disease, and the restoration of normal or optimal function.

Health services in Nova Scotia currently emphasize the acute care of physical illness, with the delivery of services located primarily in the institutional, hospital setting. The Royal Commission proposes changes to adjust the balance between the treatment of illness and the other components of health care. The greatest potential for advances lies in community-based services. Accordingly, some small community hospitals could take on a larger health role as community health centres. Such restructuring is necessary to promote services that embrace health promotion and the treatment of disease in acute care, long-term care, rehabilitation and palliative care.

Health Professionals

Health needs of the population, not the aspirations of professional groups, must drive human resource planning in the health sector. Professional boundaries and institutional barriers currently interfere with the effective and efficient use of professional services. Future appropriate human resource planning must strike a new balance between physicians and other health professionals, with health needs and demographic information determining the number and mix of professionals required. Training programmes must be adapted to produce professionals who will practice in community settings as well as in institutions. Approaches for case management and multi-professional health care delivery involving doctors, nurses, and other health professionals need to be developed.

Since nurses will continue to be the largest health professional group, a new nursing strategy should improve access to care, the quality of care, and the cost-effective use of limited resources. Their role in the delivery and management of health services must be recognised and expanded. Serious attention must be given to the worklife and career structures of nurses and many other health professions. Failure to take action now will impair the Province's ability to provide adequate levels of service in the future.

Appropriate Use of Technology

As people hear of rapid advances in technology, they develop unrealistic expectations of what the health system can do for them. Like any other health resource, the use of technology must reflect population-based regional needs. Technological advances are creating and will continue to create fiscal pressures. They also raise ethical dilemmas and questions concerning appropriate care. While information on clinical assessment can be borrowed from other jurisdictions, the economic and ethical aspects of assessments need to reflect local values and consider costs. Established practices that are characterized by low cost but high volume, need assessment and review as much as costly, new and emerging "high tech" procedures and equipment.

Capital and Financial Resources

The Royal Commission believes that the Nova Scotian health system is, as a whole, adequately funded, but that existing financial resources do need to be redistributed more equitably and managed more effectively. The funding of the health system must be approached as one component of an integrated economic strategy, with health expenditures controlled and managed to promote other vital aspects of the economy. A decentralized and rationalized process of decision-making should result in effective and efficient use of existing capital, with future capital construction and equipment acquisitions being based on demonstrated service needs, health goals, and priorities.

THE NEXT STEPS

Twenty years ago the Province of Nova Scotia joined with the federal government to provide its citizens with publicly-funded, universal access to all necessary medical and hospital services. This was an important accomplishment of which all Nova Scotians are justifiably proud. Indeed, it was a major **first step** on the path to achieving the highest possible health standards, as envisaged by the (Hall) Royal Commission on Health Services in 1964. While the range of services and benefits provided under health insurance has broadened, the focus has remained on the treatment of disease through physician and hospital services.

Shortly after the introduction of Medicare, concerns began to be expressed about health care use and escalating costs. A number of federal and provincial studies were undertaken during the 1970s to review expenditures and propose alternate means of providing services. The Nova Scotia Council of Health[2] concluded that the publicly-funded health system could be improved and costs contained to a level that the province could afford. It recommended the exploration of new ideas and extensive restructuring of the system.

More recently, the Nova Scotia Legislative Select Committee[3] on Health likewise concluded that the health of Nova Scotians could be improved, and significant savings realized, by devising a strategy for the delivery of health services designed to prevent disease and promote health. As a means of helping to curtail institutional expansion, the Committee called for the introduction of a co-ordinated home care programme. While there has been some movement towards ambulatory and community care, the Royal Commission maintains that the shift to date has been limited, and the emphasis is still predominantly on institutional care.

Despite repeated warnings about the impending crisis in health care, Nova Scotians continue to report a high level of satisfaction, if not contentment, with their health system. This high degree of satisfaction is understandable because access to conventional health care services has shortened periods of sickness, reduced the extent of disability, and prolonged life. To this extent, then, health expenditures are seen as investments with the prospect of fruitful dividends. However, the current emphasis on institutional care has not had the expected positive impact on the overall health status of Nova Scotians. As in other provinces, Nova Scotia's accomplishments remain well short of the vision of the Hall Commission's "Health Charter for Canadians".[4]

There are those who propose to solve current problems with a seemingly unfailing faith in expensive technology, additional human resources, and bigger institutions. Others argue that added investment in the acute care system would yield only marginal improvements in health status. The Royal Commission believes that it is time to fundamentally re-think the structures and objectives of our health system.

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[2] The Nova Scotia Council of Health, **Health Care in Nova Scotia: a New Direction for the Seventies** (Halifax: 1972).

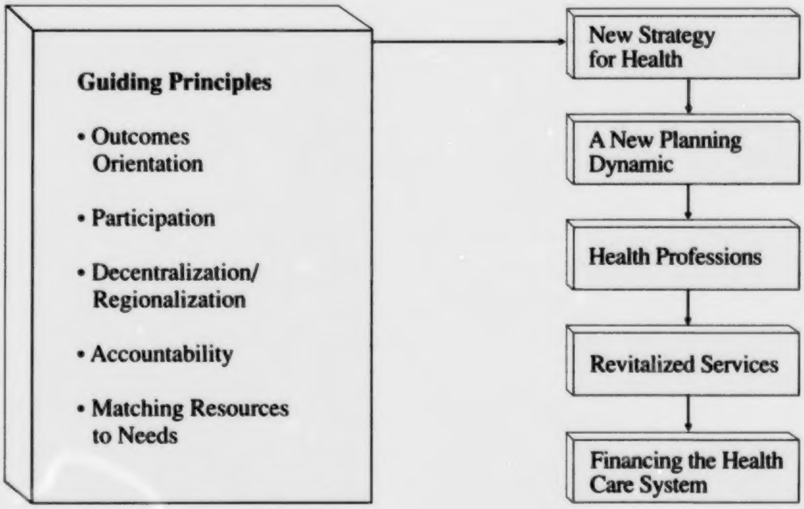
[3] The Nova Scotia Legislative Select Committee on Health, **Report** (Halifax: 1984)

[4] Royal Commission on Health Services, **Report** (Ottawa: 1964)

The challenge is to devise a new health strategy that maximizes the impact of health expenditures by establishing a cost-effective health system that not only treats illness, but also prevents disease and promotes well-being. Hence, the Royal Commission has given a great deal of attention to the planning processes needed to ensure equitable access to a health system that champions as well as maintains health. These recommendations should be viewed as **the next steps** in building a strategy to achieve this new health system. While the approach may be new, the Royal Commission advances no novel ideas; they have all been, or are being introduced and widely discussed in Nova Scotia and other jurisdictions.

Figure 1.1

Guiding Principles


Guiding Principles
• Outcomes Orientation
• Participation
• Decentralization/ Regionalization
• Accountability
• Matching Resources to Needs
New Strategy for Health
A New Planning Dynamic
Health Professions
Revitalized Services
Financing the Health Care System

The reasons for change are presented in the next Chapter. Subsequent Chapters apply the guiding principles set forth above to recommendations that constitute **the next steps** in a new health strategy for Nova Scotia. The Royal Commission's recommendations fall into two categories according to priority and emphasis. Major recommendations are highlighted in colour throughout the text.

Chapter III proposes structures and processes to improve the management of the health system. The Royal Commission proposes innovations in the administration of the health care system, incorporating the guiding principles of a health policy aimed at good health, participation, decentralization and accountability. Key to these changes are recommendations calling for a **Comprehensive Health Policy**, a **Provincial Health Council**, a **Ministry of Health**, and the formation of **Regional**

Health Authorities. The Royal Commission also addresses the need for improved coordination and cooperation between government departments and among the Atlantic Provinces.

Chapter IV deals with selected **health professions**. A review of the roles of these professions is prerequisite to achieving efficient and effective health care delivery, and is central to controlling future health costs. Since the rate of increase of public spending on health care is closely related to growth in the number of physicians, measures are recommended for controlling the supply and use of physicians' services, as well as for controlling expenditures on these services. The Royal Commission also makes recommendations concerning the education, supply and demand, and worklife of nurses and associate health professionals.

In Chapter V, the Royal Commission addresses the **delivery of health services** in terms of its guiding principles of health policy aimed at results, participation, and matching resources to needs. The Royal Commission views health technology as a primary issue in determining the health care system Nova Scotians want, given the available resources. Steps to complete the range of health services offered to Nova Scotians are proposed. Recommendations regarding community health and illness prevention programmes are presented as the foundation for improved health status. Consumer education and strengthened management practice are required to curb the exceptionally high rate of cost increases in the Pharmacare programme. The Royal Commission also recommends changes to the provision of ambulance services by separating emergency and patient transportation services, with the latter pre-scheduled and more tightly managed.

Chapter VI examines the current economic situation and proposes measures for **improved management of health expenditures**. A new population-based regional funding mechanism is called for. The administration of hospitals is examined within the context of this new health strategy. Steps to promote cost-efficient utilization of health care resources, by consumers and health care providers, are suggested.

The Royal Commission believes that it is possible to re-define, re-structure and improve our health system to better suit the current and future needs of Nova Scotians. It also concludes that costs can be contained to a level that the province can afford, while continuing to deliver quality care to its citizens. The key lies in acceptance of change. But even given this acceptance, restructuring the health system will take time. It will take time to alter long-standing preconceptions and practices. It will take time to overcome system inertia and more time to implement practical, effective alternatives. Furthermore, experience tells us that everyone who has a stake in the health system must participate in this process of change. The Royal Commission's recommendations are made in the hope that all concerned with the health of Nova Scotians will join together and take these **next steps** with a sense of urgency, commitment, and confidence.

CHAPTER II
IMPERATIVES FOR CHANGE: THE NOVA SCOTIA REALITY

INTRODUCTION

Government involvement in health care must be examined as a component of public policy. Health care policy is evolving in the context of changing political, economic, and social conditions, all of which have a continuing impact on the provincial health care system. Even the definition of health is changing. In face of this, the government must practice fiscal restraint and, at the same time, deal with an increasing demand for, and use of, health care services. This is obviously a complex and difficult situation which calls for changes in policy and perspective.

This Chapter places the Royal Commission's examination of health and health care within a broad economic and social context. Drawing on national and international comparisons, it describes the province's health care expenditures and economic climate, federal-provincial fiscal arrangements, and the health of Nova Scotians as well as social and demographic trends affecting health care.

The term "health expenditures" can refer only to public spending or to all spending, regardless of source. The Royal Commission is concerned primarily with the first definition — namely, that proportion of provincial public spending that falls under the Department of Health and Fitness and its related agencies. However, in order to make valid inter-provincial and international comparisons, Health and Welfare Canada has adopted the second definition which includes all public and private expenditures on health, regardless of source. In this Chapter, most of the expenditure figures are drawn from publications of Health and Welfare Canada.

1. PROVINCIAL HEALTH CARE EXPENDITURE PATTERNS

Health care expenditures are the single largest item in the provincial government's budget.[1] An estimated $1.1 Billion ($1,100,000,000) will be spent on health care in the 1989-90 fiscal year. Figure 2.1 compares the estimate for health expenditures with other budgetary items.[2]

The 26.5 per cent attributed to health care does not represent total provincial spending on health. The Department of Community Services will spend an additional $104 million on health-related programmes in 1989-90. Homes for special care, services to the mentally retarded, and assistance for drug expenses under the Family Benefits Programme are funded by the Department of Community Services. In addition, several health-related programmes are cost-shared with municipalities. Past and present health expenditures also represent a considerable proportion of the accumulated public debt and ongoing debt service charges which currently account for 16.6 per cent of total provincial spending.

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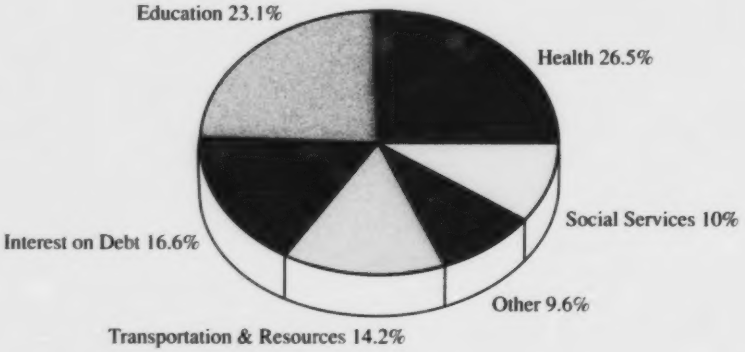
[1] Calculations in this section are based on the Nova Scotia House of Assembly, **Estimates of the Government of Nova Scotia for the Fiscal Year 1989-90** (Halifax: 1989).

[2] Excludes capital cost allowances and carrying charges.

Figure 2.1

Gross Expenditures by Function
Nova Scotia 1989-90



Source: BUDGET ADDRESS
NOVA SCOTIA HOUSE OF ASSEMBLY
FOR THE FISCAL YEAR 1989-90

Since 1980 health expenditures have increased consistently at rates higher than increases in total provincial spending. As shown in Figure 2.2, public spending on health has been responsible for an increasing proportion of total gross provincial expenditures, rising from 22.2 per cent in 1981 to a high of 26.8 per cent in 1987.[3] Government efforts to control costs have resulted in some stabilization in health expenditures as a proportion of the total provincial budget in the last three years.

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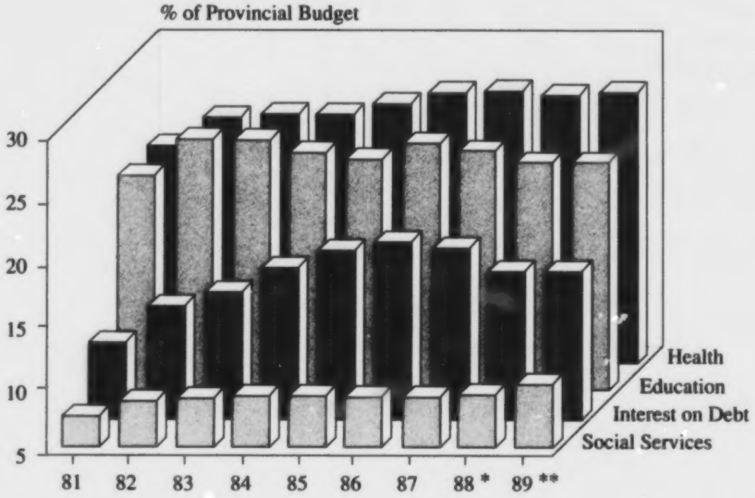
[3] Nova Scotia House of Assembly, **Budget Address** (Halifax: 1982-1989).

Increasing health care costs is a national as well as an international trend. Among the countries belonging to the Organization for Economic Co-operation and Development, Canada ranked fifth in total health care expenditures as a proportion of gross domestic product, behind the United States, Sweden, France and the Netherlands.[4]

Figure 2.2

Gross Expenditure by Function
9 Year Comparison



Source: BUDGET ADDRESSES
NOVA SCOTIA HOUSE OF ASSEMBLY

** Forecast
*** Estimate

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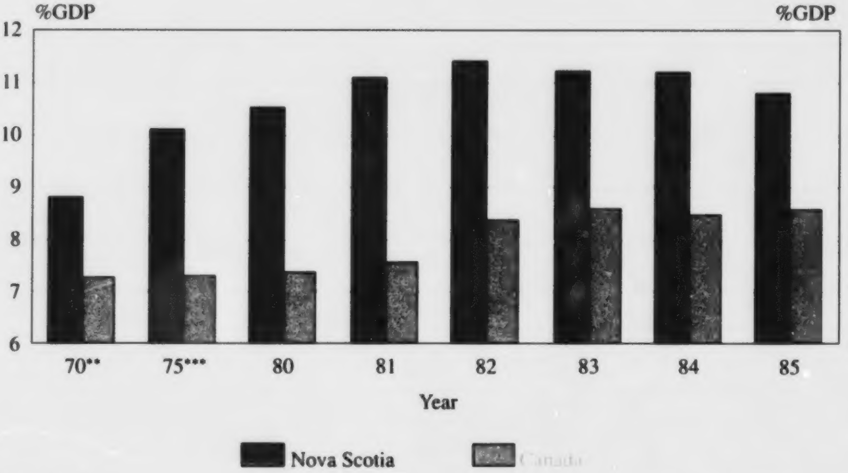
4. Organization for Economic Co-operation and Development, **Financing and Delivering Health Care: A Comparative Analysis of OECD Countries** (Paris: 1987).

Figure 2.3 illustrates that Nova Scotia has consistently been above the national average in terms of the percentage of gross domestic product that it spends on health care.[5] The relatively higher proportion of gross domestic product going to health care in Nova Scotia is due, in part, to higher levels of gross domestic product in the central and western provinces and cannot be solely attributed to higher health care costs in Nova Scotia. In 1985, the most recent year for which data are available, the per capita health care costs in Nova Scotia, though the highest in the Atlantic provinces were 91 per cent of the Canadian average, while per capita gross domestic product was 72 per cent of the national average.

Figure 2.3

Total Health Expenditures *
% Gross Domestic Product (GDP)



* Public and Private, all sources
Source: STATISTICS CANADA,
HEALTH & WELFARE CANADA

** Introduction of Medicare
*** 5 Years After Introduction of Medicare

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[5] Statistics Canada, **Canadian Economic Observer** (Ottawa: December 1988); Health and Welfare Canada, **National Health Expenditures in Canada 1975-1985** (Ottawa: 1987), and Health and Welfare Canada, **National Health Expenditures in Canada 1970-1982** (Ottawa: 1985).

2. IMPACTS OF HEALTH EXPENDITURE ON THE PROVINCIAL ECONOMY

Government spending on health care significantly affects the provincial economy.[6] As a result of $863 Million in direct expenditures by the Province in 1986-1987, $1,320 Million in gross domestic product was generated. Direct personal income and induced income[7] account for a large part of the resulting gross domestic product. In fiscal year 1986-1987, health care spending created an estimated 36,400 full-time jobs, 19,000 directly in health care and 17,400 elsewhere in the economy. These 19,000 direct jobs accounted for over 5 per cent of total provincial employment and 9 per cent of total provincial earned income. There are more jobs in the health sector, with much higher income levels, than in the primary industries of fishing, agriculture and forestry combined.

In general, expenditures on goods and services in the health sector represent an important potential source of provincial employment and income. There are opportunities for private industry to supply more goods and services to the health sector. Various economic development agencies in Nova Scotia can offer assistance in identifying the nature and type of goods and services which may be produced locally for this internal market. Clearly, many items are of a specialized nature, and would require long production runs and extensive markets to make local production feasible. Other items, though, may lend themselves to local manufacture to serve Nova Scotia hospitals and the broader regional market in the Atlantic Provinces. Further work is required to determine the potential.

Expenditures and employment levels in the health care sector are higher in Halifax County than elsewhere in the province. The population of the Halifax metropolitan area constitutes about 35 per cent of the provincial total. It accounts for about 55 per cent of total health spending, 56 per cent of total health-related employment, and 50 per cent of the province's physicians.

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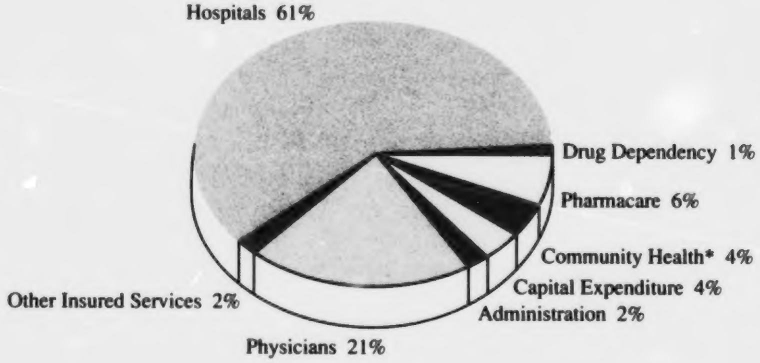
6. Information in this section is based on a study prepared for the Nova Scotia Royal Commission on Health Care by Gardner Pinfold Consulting Economists Limited, **The Economic Impact of Public Expenditures on Health Care in Nova Scotia.** This report is published in Volume II of the Research Studies of the Royal Commission.
7. Induced incomes result from employment created through the spending of direct incomes.

3. HOW THE HEALTH CARE BUDGET IS SPENT

The Royal Commission analyzed expenditures and rates of increase in health spending for major health services, including hospitals, physicians' services, pharmacare, community health, mental health, drug dependency and ambulance services.[8] Review of expenditure patterns since Medicare's introduction shows that the vast majority of health care expenditures in Nova Scotia, and in Canada generally, has been on hospital programmes, physicians' services, and prescription and non-prescription drugs. At 61 per cent of the provincial health budget for 1989-90, public spending on general hospital services is the largest category of government health expenditures (see Figure 2.4).[9] Payments to physicians account for 21 per cent. Expenditures on programmes for community health, including nutrition services, children's dental services, public health and health promotion, make up

Figure 2.4

Department of Health & Fitness
Gross Expenditure Estimates, 1989-90



Total Gross Expenditure – $1.064 Billion

Source: ESTIMATES OF THE GOVERNMENT OF NOVA SCOTIA FOR THE FISCAL YEAR 1989-90

* Includes Some Administrative Costs

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8. Comparative information in this section is based on a study prepared for the Nova Scotia Royal Commission on Health Care by the Institute for Health Care Facilities of the Future, **Interprovincial Comparison of Health Care Expenditures.** This study is published in Volume I of the Research Studies of the Royal Commission.
9. Nova Scotia House of Assembly, **Estimates of the Government of Nova Scotia for the Fiscal Year 1989-90** (Halifax: 1989).

4 per cent of the 1989-90 health budget. Expenditures on drug dependency programmes constitute an additional 1 per cent of the health budget for the same fiscal year.[10]

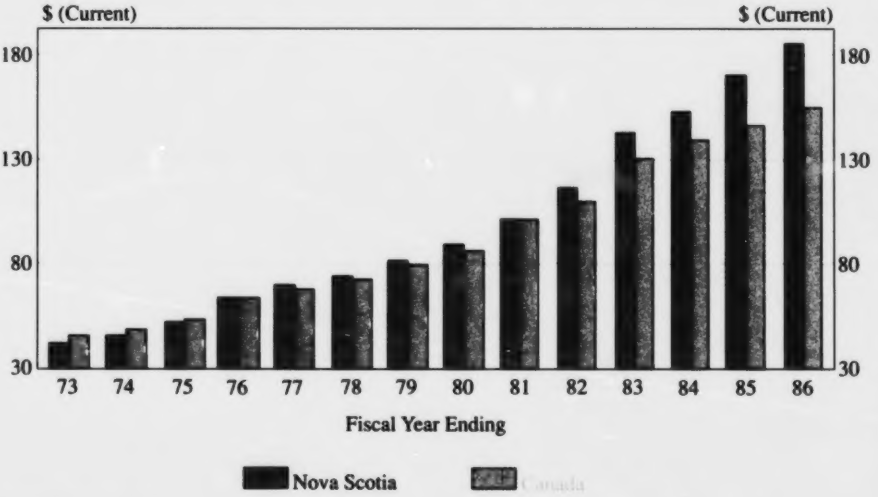
With a gradually increasing proportion of the population living into their late seventies, the incidence of chronic and degenerative illnesses will undoubtedly change. The availability of new treatment technologies will also affect the allocation of health care resources. However, without sufficient information to permit an understanding and management of these issues, it is difficult to ascertain the degree to which these factors will cause increases in health expenditures.

Supply, Remuneration and Use of Physicians' Services

Public spending for physicians' services has grown faster in Nova Scotia than in other provinces. The average income from all professional sources for physicians in Nova Scotia was second only to Ontario physicians for the fiscal year ending in 1986. In terms of per capita expenditure, Nova Scotia has moved from ranking sixth in 1973 to third in 1986. Figure 2.5 shows that Nova Scotia's expenditure of $183

Figure 2.5

Expenditure Per Person on Physicians' Services, Nova Scotia and Canada



Source: HEALTH & WELFARE CANADA

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10. Calculated as a percentage of estimated Total Ordinary Expenditures for General Hospital Services and Medical Services in the Department of Health.

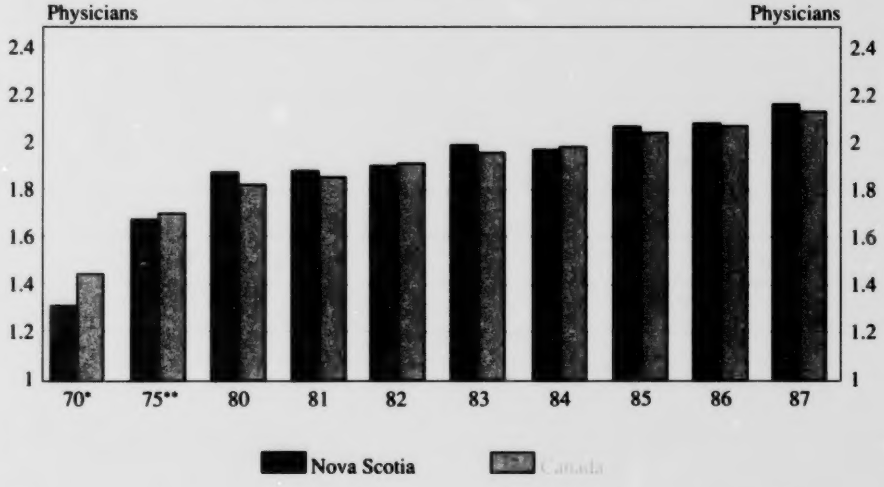
per capita was 20 per cent above the national median in 1986.[11] When measured in constant dollar terms[12], expenditure per insured person on physicians' services in Nova Scotia has increased on average 3.1 per cent per year since 1970. In the five year period of 1982 to 1987, the yearly increase averaged 3.4 per cent per year.

Increased per capita spending on physicians' services is a result of several factors, including an increased supply of physicians, higher remuneration rates for physicians, and increasing utilization of services by the population. As mentioned above, an ageing population and changes in technology and treatment patterns also affect per capita expenditure.

Since 1970 **the supply of physicians in Nova Scotia has almost doubled, exceeding the growth rate of physicians for the country as a whole.** The actual number of active physicians (including interns and residents) has risen 85.3 per cent, from 1032 physicians in 1970 to 1912 physicians in 1987.[13] During the same period, physician supply in Canada increased by 77.4 per cent.

Figure 2.6

Physicians Per 1,000 Population
Nova Scotia and Canada



Source: HEALTH & WELFARE CANADA

* Introduction of Medicare
** 5 Years After Introduction of Medicare

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[11] Health and Welfare Canada, **Per Capita Cost of Medical Care Program, Fee For Service to Physicians** (Ottawa: February 1984); Health and Welfare Canada, **National Grouping System: Data and Documentation 1980-81 to 1984-85** (Ottawa: June 1987), and Health and Welfare Canada, **National Grouping System: Interim Report** (Ottawa: April 1988).

[12] Standardized to fee schedule increases

[13] If this physician supply is measured in terms of full-time equivalent (FTE) physicians, supply has grown from 611.1 FTE in 1970 to 1231.7 in 1987, an increase of 100.1 per cent..

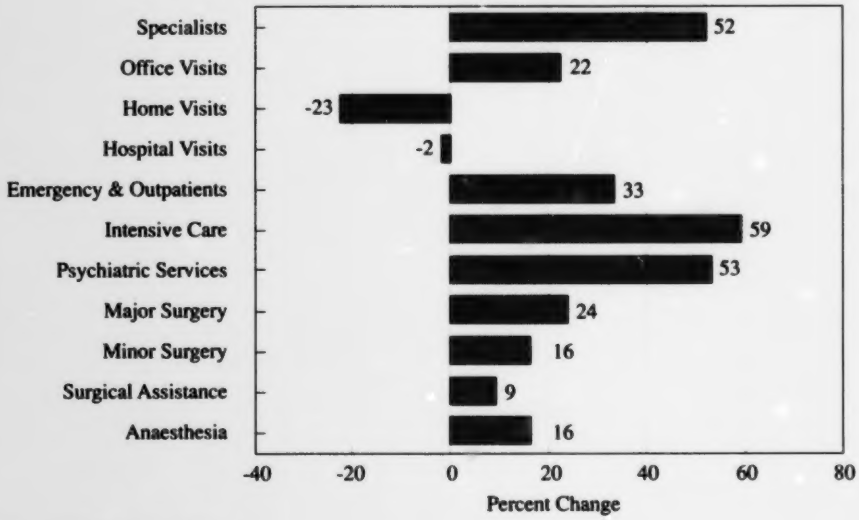
Provincial comparisons of physicians per 1000 population allows comparisons of growth in physician supply relative to growth in population. Figure 2.6 shows that, compared to the Canadian average, the relative number of physicians has risen more quickly in Nova Scotia.[14] In 1970, there were 1.3 physicians (including interns and residents) per 1000 Nova Scotians. In 1987, there were 2.2 physicians per 1000.

Explanations for the increase in the **supply** of physicians are found in an increased output of graduates from the nation's medical schools and a lack of measures to control immigration of foreign-trained physicians. If medical school enrolments and the immigration of physicians continue unchecked, Nova Scotia's physician to population ratio is projected to rise even further.

The **use** of physicians' services has also been increasing. Physicians' services per 1000 population have increased for all types of services, with the exception of home visits and hospital visits (Figure 2.7).[15] The number of services received per insured person has also increased in this period, with a drop in those receiving no services or 1 to 2 services per year, and an increase in those receiving more than 3 services per year.

Figure 2.7

Percent Change in Physicians' Services Per 1,000 Population 1981-87



Source: MARITIME MEDICAL CARE, INC.

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[14] Health and Welfare Canada, **Health Personnel in Canada,** [formerly entitled: **Canada Health Manpower Inventory**] (Ottawa: various years).

[15] Information in this section is based on a report by Maritime Medical Care Incorporated, **Utilization of Physicians' Services in Nova Scotia 1975-76 to 1987-88 Draft Report**, (Dartmouth: 1989).

It is difficult to determine the causes of this increased use. A recent study by Maritime Medical Care found an average annual increase in utilization of 4.2 per cent, 2.6 per cent of which is not explained by new services, population growth or population ageing.

Analysis of **fee schedules** and physician practice patterns has demonstrated that simply controlling the price of services cannot regulate growth in expenditures for physician's services. Worth noting are the differences in the rate of use among different types of physicians' services and specialties. Services by medical specialists show the highest increases in use, followed by those of surgical specialists and general practitioners. Rates of use also differ between geographical areas of the province, depending, in part, upon the distribution of physicians. Areas with higher per capita general practitioner and specialist ratios have demonstrated high use of services. This illustrates increasing need for services, increasing demand and expectations of the public, or demand created by physicians themselves.

Because of expected increases in the number of physicians, whose supply is forecast to grow at rates higher than the growth of the insured population, it is reasonable to assume that services per 1000 population, and per capita expenditures on physicians' services, will continue to grow in Nova Scotia. Given the trends noted above, there is a need to control the factors of supply, utilization, remuneration, and distribution of physicians and their services.

The Hall Commission Report of 1964 stated that the maintenance of the 1961 physician-population ratio of 1:857 was a realistic goal. Times and conditions have changed, but with the 1987 ratio in Nova Scotia at 1:461 the Royal Commission contends that there are too many physicians in Nova Scotia. Moreover, the distribution of services in certain areas and among certain types of medical practice was identified as a concern during the Royal Commission's Public Hearings. The Royal Commission also believes that given current levels of spending on physicians' services in Nova Scotia, action must be taken immediately to address these issues of supply and distribution.

Hospital Services

Hospital services continue to consume the majority of health resources in Nova Scotia. A report prepared for the Royal Commission found a national trend towards decreased expenditure on hospital services and increases on other types of institutions, such as homes for the aged and for the mentally and physically handicapped, a trend that is not as evident in Nova Scotia.[16] In Saskatchewan, Manitoba, and New Brunswick, for instance, more emphasis has been placed on other institutions during the last decade. Other provinces have also been actively developing home care and early discharge programmes over the last ten years, signalling a commitment to more appropriate and less costly types of care. Nova Scotia has recently begun to develop some non-institutional alternatives to chronic care.

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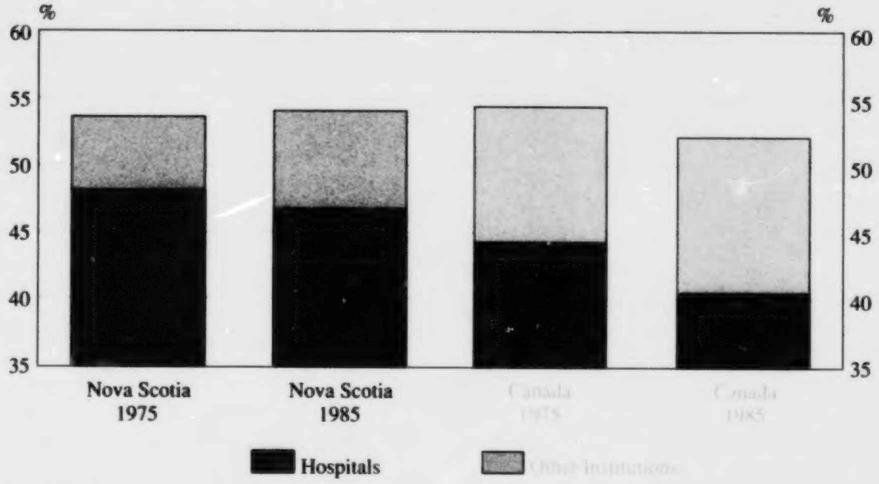
[16] Institute for Health Care Facilities of the Future, **Inter-provincial Comparison of Health Care Expenditures.**

Figure 2.8

Percentage Distribution of Total Health Expenditures on Hospitals & Institutions



* Public and Private, all sources
Source: HEALTH & WELFARE CANADA

The segment of the Nova Scotia health budget allocated to hospital services has remained fairly stable over the past few years, at 61 per cent of the total provincial health budget.[17] In order to compare Nova Scotia's hospital spending to that of other provinces it is necessary to use data depicting total private and public expenditures on health. Figure 2.8 illustrates the national trend towards decreased expenditure on hospital services and increases for other types of institutional care. By comparison, Nova Scotia's spending on hospitals has not fallen as rapidly. Furthermore, although the national proportion of spending on institutions has decreased in the period 1975 to 1985, Nova Scotia's public and private expenditures on all forms of institutional care has increased and, at 54.3 per cent of all health expenditures, exceeds the national average of 51.7 per cent.[18]

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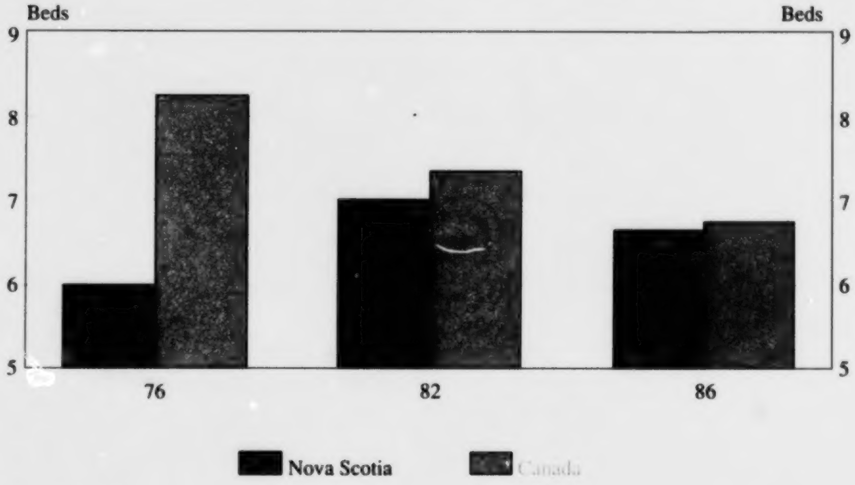
[17] This segment includes expenditure on general hospitals, psychiatric hospitals, capital expenditures, capital debt assistance, and interest subsidies.

[18] Health and Welfare Canada, **National Health Expenditures in Canda 1975-1985** (Ottawa: 1987).

Analysis of bed to population ratios helps to explain the different hospital expenditure trends. Figure 2.9 shows the national ratio of general hospital beds per 1000 population has steadily declined. In Nova Scotia the ratio increased from six beds per 1000 population in 1976 to seven beds per 1000 in 1982. By 1986, bed supply decreased to 6.6 beds per 1000 — a figure more in line with the national average of 6.7 beds per 1000,[19] but well above the 4.5 acute care beds per 1000 population recommended by the Nova Scotia Council of Health in 1972.[20]

Figure 2.9

Hospital Beds Per 1,000 Population
Nova Scotia and Canada



* Public and Private, all sources
Source: HEALTH & WELFARE CANADA

A second factor contributing to differences in hospital expenditure trends is the use made of hospital beds. Nova Scotia's occupancy rate of 75 per cent for general hospital beds in 1986 is low compared to the national average of 84 per cent, although it is in line with those of other Atlantic provinces (see Figure 2.10).[21] This rate suggests a surplus of general hospital beds in the hospital system and an opportunity for reallocating resources to other types of services.

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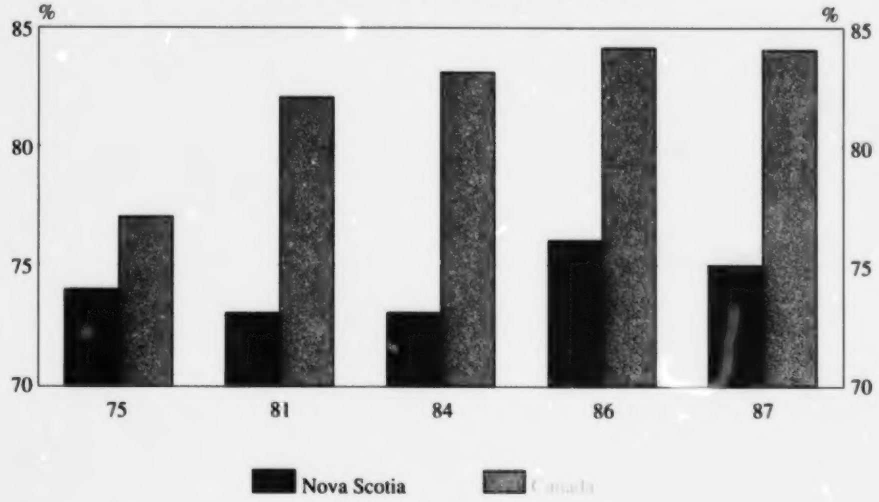
[19] Statistics Canada, **List of Canadian Hospitals** (Ottawa: Annual)

[20] Nova Scotia Council of Health, **Health Care in Nova Scotia: a New Direction for the Seventies** (Halifax: 1973).

[21] Statistics Canada, **Hospital Statistics in Preliminary Annual Report** (Ottawa: various years).

Figure 2.10

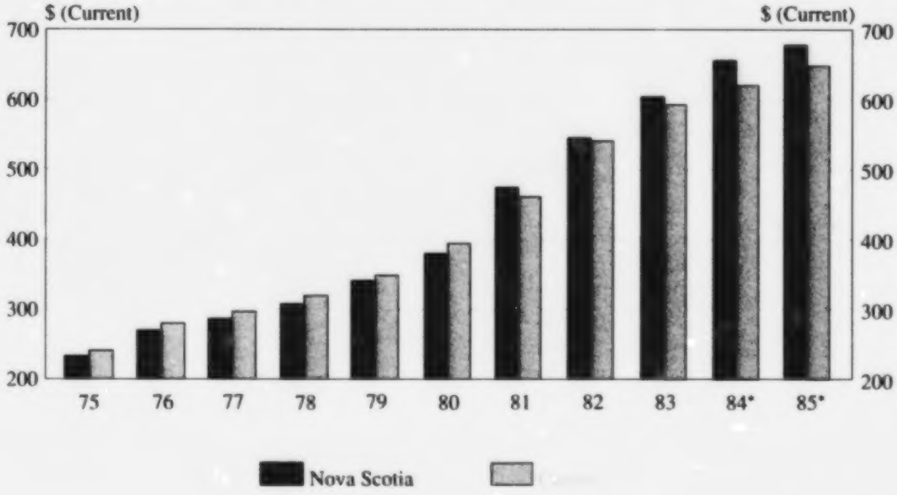
Occupancy Rates for Hospitals
Nova Scotia and Canada



Source: STATISTICS CANADA

Figure 2.11

Expenditure Per Person on Hospitals
Nova Scotia and Canada



Source: HEALTH & WELFARE CANADA

* Estimate

Thirdly, since 1981, Nova Scotia's costs for hospital services have exceeded those of Canada as a whole. The last two columns in Figure 2.11 present data for 1984 85 showing $663 per capita for hospital services in Nova Scotia compared to a national average of $634.[22] Comparisons with the other Maritime provinces must take into account the fact that Nova Scotia provides some tertiary care to residents of New Brunswick and Prince Edward Island.

Pharmacare

Expenditures on both prescription and non-prescription drugs are increasing as a proportion of total health care expenditures. Over the period from 1975 to 1985, drug costs have increased from 9.8 to 14.7 per cent of total private and public expenditures on health. This is due in part to Pharmacare costs, which run at 32 per cent above the national average in Nova Scotia. The Pharmacare programme has increased on average 18 to 20 per cent annually during the past decade (Figure 2.12).[23] The Consumer Price Index increases for that period averaged 8 per cent.

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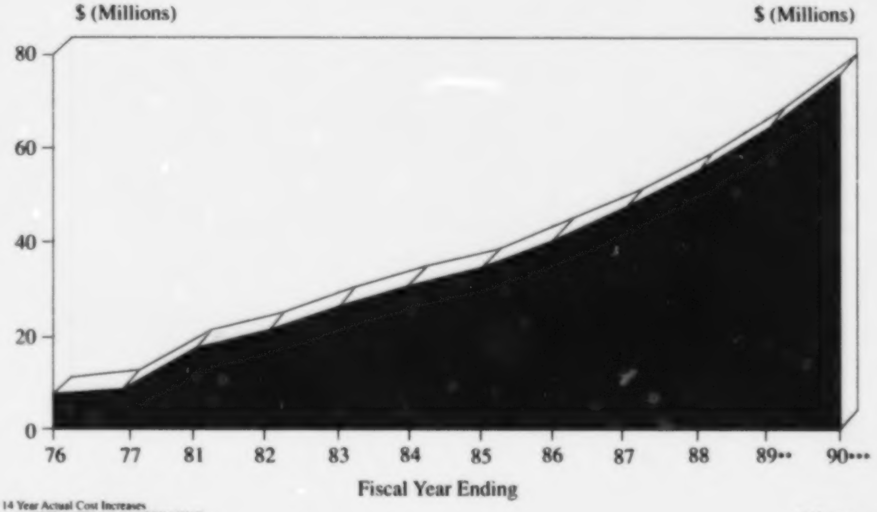
[22] Health and Welfare Canada, **National Health Expenditures in Canada 1975-1985** (Ottawa: 1988).

[23] **Estimates of the Government of Nova Scotia** (Halifax: 1974-1989).

More stringent cost control measures are needed at the present time to check this upward trend in Pharmacare costs. With a growing number of beneficiaries under the programme, expenditures on Pharmacare can be expected to increase unless controls are adopted. The Royal Commission discusses other concerns related to the Pharmacare programme in Chapter V.

Figure 2.12

Seniors' Pharmacare Programme Annual Cost Increases*



* 14 Year Actual Cost Increases
Source: ESTIMATES OF GOVERNMENT OF NOVA SCOTIA, 1974-75 to 1989-90

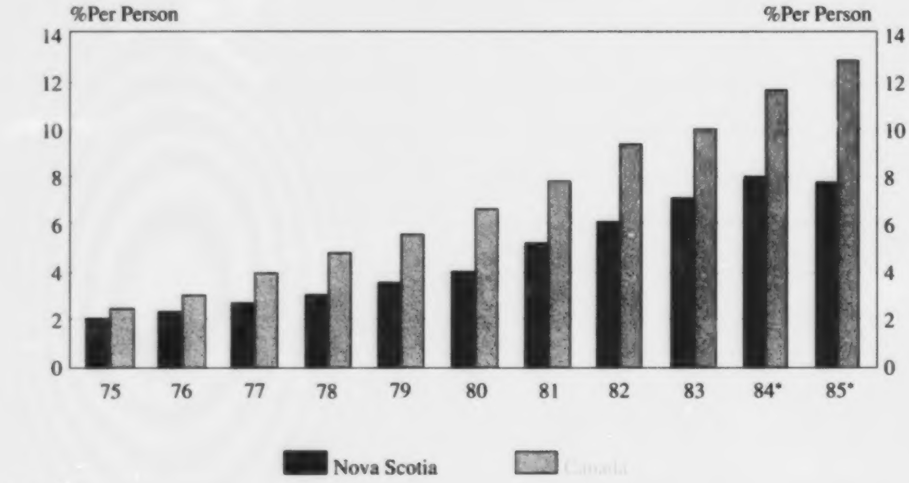
•• Forecast
••• Estimate

Ambulance Services

The Ambulance Subsidy Programme, user fees, third party insurance payments, and hospitals' budgets pay for ambulance services on a fee-for-service basis. The Royal Commission has examined the rate of increase in the direct cost to government of ambulance services and considered issues of overall efficiency and effectiveness. While earlier reports advocating reforms of ambulance services have been implemented in part, a greater rationalization of ambulance services is warranted.

Figure 2.13

Expenditure on Ambulance Services*
Nova Scotia and Canada



* Public and Private
Source: HEALTH & WELFARE CANADA

* Estimate

In simple dollar terms, expenditures on the Ambulance Subsidy Programme have increased sharply since its inception, from $300,000 in 1970 to $12.5 million estimated for 1989. However, as Figure 2.13 illustrates,[24] Nova Scotia's total per capita expenditure on ambulances, including private and public sources, was below the Canadian average in 1983.[25]

While a number of provinces spend more per capita on ambulances than does Nova Scotia, some spend less. Quality of service cannot be equated with expenditure. As with many other health programmes, it is difficult to compare expenditures without understanding the differences in the way funds are being spent. Volunteer services play a much larger role in the provision of ambulance services in some other provinces, substantially lowering their costs. Also, several provinces provide air ambulance service, and some have higher standards of training which increase labour expenditures.

To further complicate comparisons, ambulance services are funded through a variety of agencies in different provinces. While a major portion of funding typically is supplied by Departments of Health, grants to municipalities may include substantial support for ambulance services in other jurisdictions. These municipalities may in turn contribute additional funds from their own revenues. Other provinces may depend less on private operators than does Nova Scotia, or may use different funding formulas. It is therefore difficult to obtain an accurate estimate on how much is spent by whom for what, in terms of ambulance service.

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[24] Health and Welfare Canada, **National Health Expenditures in Canada 1975-1985** (Ottawa: 1988).

[25] The last year for which comparative information on actual expenditures is available.

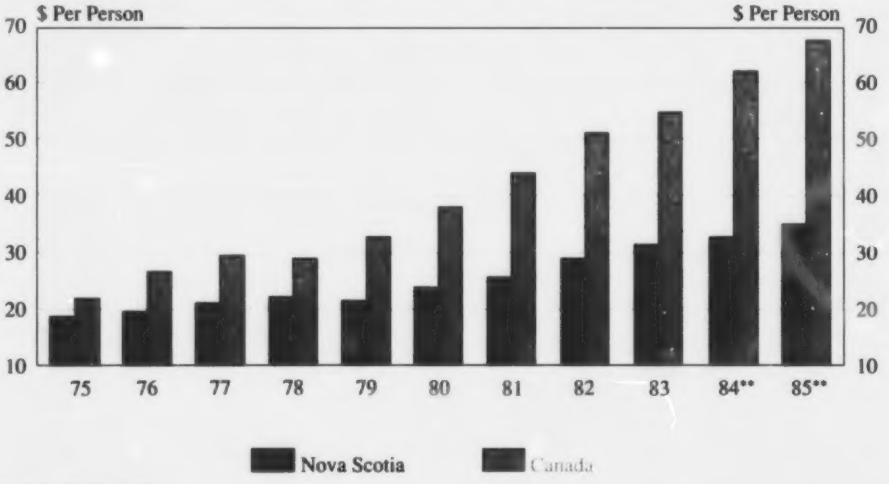
Given the structure of the ambulance sector in Nova Scotia, the Royal Commission believes that the present level of expenditure, estimated at $12,508,700 or $14.13 per capita for fiscal year 1989-90, is reasonable. Nonetheless, as described further in Chapter V, the Royal Commission maintains that there are inefficiencies in the provision of ambulance services in this province, which, if addressed, should permit re-allocation of funds for improved standards and better quality of care.

Community Health and Drug Dependency Programmes

The Royal Commission was specifically mandated to review the rates of increase in spending on community health and drug dependency programmes. Figure 2.14 shows that per capita expenditures in current dollars for these programmes have increased from approximately $19 to $35 between 1975 and 1985.[26] The average expenditure per capita in Canada has increased from approximately $21 to $65 over

Figure 2.14

Expenditure Per Person on Public Health (Including Drug Dependency Programmes)



* Total Private and Public Spending
Source: HEALTH & WELFARE CANADA

** Estimate

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[26] Health and Welfare Canada, **National Health Expenditures in Canada 1975-1985** (Ottawa: 1988).

the same period.[27] There is a demonstrated need for Nova Scotia to address the discrepancy in the comparative funding base.

Community health programmes are believed to represent the greatest potential for improving the health of Nova Scotians through illness prevention, public education, and health promotion. As discussed further in Chapter V, the Royal Commission proposes that funding for these programmes should be increased to reflect the new health strategy recommended in this Report.

4. ECONOMIC ENVIRONMENT

Nova Scotia's ability to sustain expenditure levels on expensive health programmes, such as physicians' services, hospital services, and Pharmacare, must be viewed in light of the current and projected economic environment of the province. Economic output, unemployment rates, inflation, and the increasing public debt will determine, to a large extent, the level of funding that can be made available for health spending.

Real growth in Nova Scotia's economic output, as measured by the provincial gross domestic product, grew 3.5 per cent annually from 1965 to 1986. The Canadian and American economies are in mature stages of development, which are generally characterized by steady, rather than rapid growth. The provincial trend is expected to follow this pattern, with a slower rate of growth forecast over the next decade.[28] An influencing factor is an expected decline in the rate of population growth. Consequently, the average age of the population is projected to increase, with a higher proportion of the population being 65 and over.

In the past twenty years, the growth in the labour force has exceeded growth in employment, resulting in a rise in unemployment rates from 5.4 per cent in 1965 to a high of 13.8 per cent in 1985. In 1988, the unemployment rate was 10.2 per cent, down from the high that occurred in 1985. While the percentage of women participating in the labour force is expected to rise, the labour force is forecast to expand at a slower rate than employment over the next fifteen years. As a result, unemployment is forecast to drop to 5.5 per cent by 2001, notwithstanding a slowing rate of economic growth.

Separating growth in provincial health expenditures into its real and inflationary components for the period 1971 to 1984 reveals that the health care inflation rate has grown by 10.7 per cent per year while the Nova Scotia gross domestic product inflation rate has grown by 9.4 per cent per year. Due to relatively high unemployment rates, tight government monetary and fiscal policies and slower economic growth, inflation is projected to remain at levels more moderate than in the past. However, health and social services costs are projected to continue to lead inflation.

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[27] Institute for Health Care Facilities of the Future, **Inter-provincial Comparisons of Health Care Expenditures.**

[28] Information in this section is based on a study prepared for the Royal Commission on Health Care by Canmac Economics Limited, **Economic Forecasts.** This study is published in Volume II of the Research Studies of the Royal Commission.

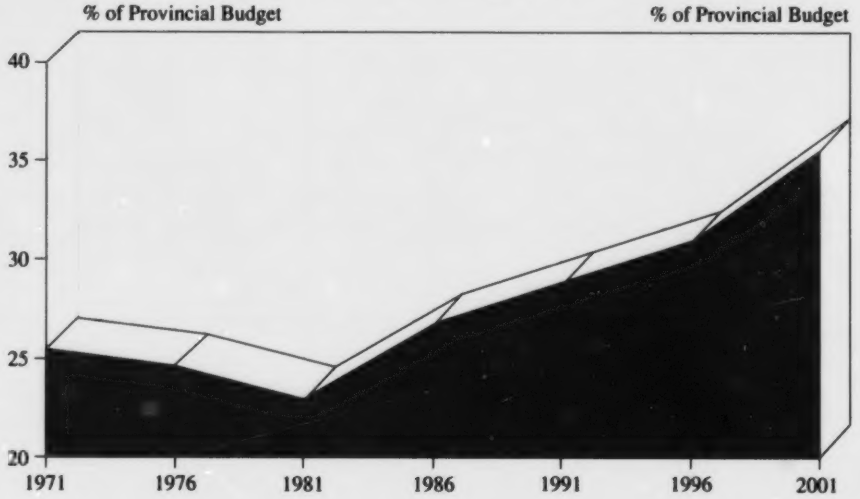
Through the development of a Nova Scotia health and social services price index, it was found that inflation rates for this sector have exceeded the Nova Scotia Consumer Price Index inflation rate by an average of 1.3 per cent over the last fifteen years. This is also expected to continue, although the differential may be somewhat less in the future.

Nova Scotia's accumulated provincial debt is in the range of $4 Billion. Approximately 17 per cent of annual provincial expenditures are spent on debt servicing charges. While it is difficult to estimate the precise amount, health spending is one major source of the public debt.

Projections for a slower pace of economic growth imply a reduction in the ability of the province to pay for health care if all other factors are held constant. In current dollars, health expenditures are expected to grow at an annual average rate of 8.7 per cent while total provincial expenditures are projected to increase at an annual average rate of 6.6 per cent. If these projections are correct, health care spending could exceed 35 per cent of total provincial expenditures by 2001 (Figure 2.15).

Figure 2.15

Health Care as a Percentage of Total N.S. Expenditure (Projected to 2001)



Source: STATISTICS CANADA (actual).
CANMAC ECONOMICS (projections)

Health care, like education and other social services, is dependent on a vibrant economy for its financial support, drawing from the collective wealth of productive components of the economy. Profits from production, trade, and services generate the needed tax revenue to finance public services. If health and other social service sectors continue to consume a growing proportion of gross domestic product and government budgets, the economy will be less able to sustain these programmes. Available resources from government will be increasingly consumed by the social service sector and by the public debt, particularly in light of a forecast reduction in the province's ability to pay for these services. Consequently, it is essential to consider the impact that such increases will have on resources available for other sectors — on education, transportation, and housing, for example— which affect health in the longer term.

5. FEDERAL-PROVINCIAL FUNDING

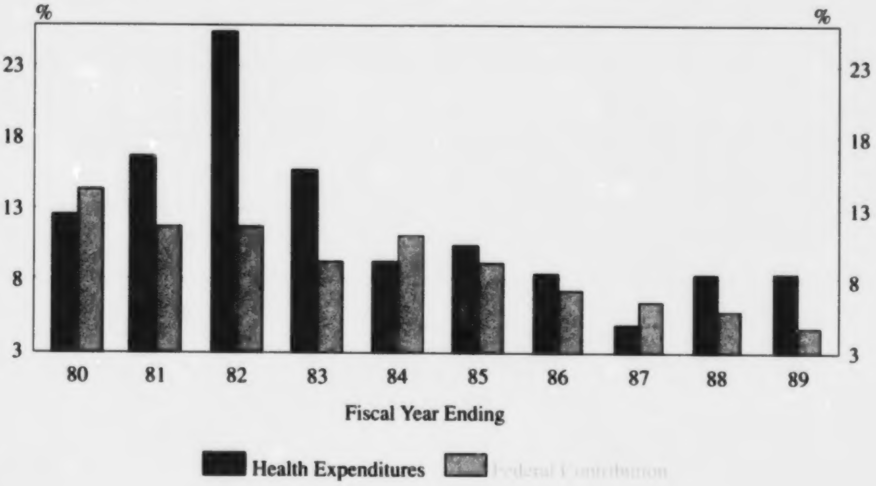
The network of publicly funded services in Canada has evolved through a series of federal-provincial cost-sharing mechanisms.[29] The strong growth of federal fiscal capacity and spending power in the post-war period allowed the federal government to have a major influence over the legislative and spending priorities of the provinces, particularly through conditional fiscal transfers. The two primary objectives of fiscal transfers between the federal and provincial governments are to balance fiscal resources and ensure that all provincial governments are able to provide an equitable level of public services without the imposition of an excessive tax burden.

Established Programme Financing provides conditional federal contributions toward the health and post-secondary education costs of the provinces. As Figure 2.16 demonstrates, the federal government's contribution to health funding through Established Programme Financing has fallen proportionately over the last decade in relation to provincial health care expenditures.[30] While the rate of growth in Established Programme Financing health care services transfers has been greater than the general rate of inflation, these payments have not kept pace with the rise in health care costs, which have increased faster than either the inflation rate and the growth of the gross national product. This has led to provinces paying a rising proportion of health care costs from their own revenue sources.

29. Information in this section is based on a report prepared for the Nova Scotia Royal Commission on Health Care by the Institute for Health Care Facilities of the Future, **Fiscal Federalism from the Perspective of Nova Scotia.** This study is published in Volume I of the Research Studies of the Royal Commission.
30. Institute for Health Care Facilties of the Future, **Fiscal Federalism from the Perspective of Nova Scotia.**

Figure 2.16

Annual Increases in Nova Scotia Health Expenditures and Federal Contributions



Source: STATISTICS CANADA

Federal contributions as a percentage of provincial health expenditures in Nova Scotia have fallen almost 10 percentage points since 1979 (see Figure 2.17).[31] Health expenditures in Nova Scotia grew by 285 per cent during the same period. With the present Established Programme Financing escalator, the federal government will continue to contribute a smaller share toward total provincial health care expenditures, unless growth in health care costs can be brought down to the rate of growth of the economy.

This situation has been further exacerbated by the unilateral decision of the federal government to alter the contribution formula and reduce federal contributions by two percentage points per year. The federal government has indicated that it may further reduce the escalator by one percentage point in the coming years, which will further increase the financial burden of the provinces.

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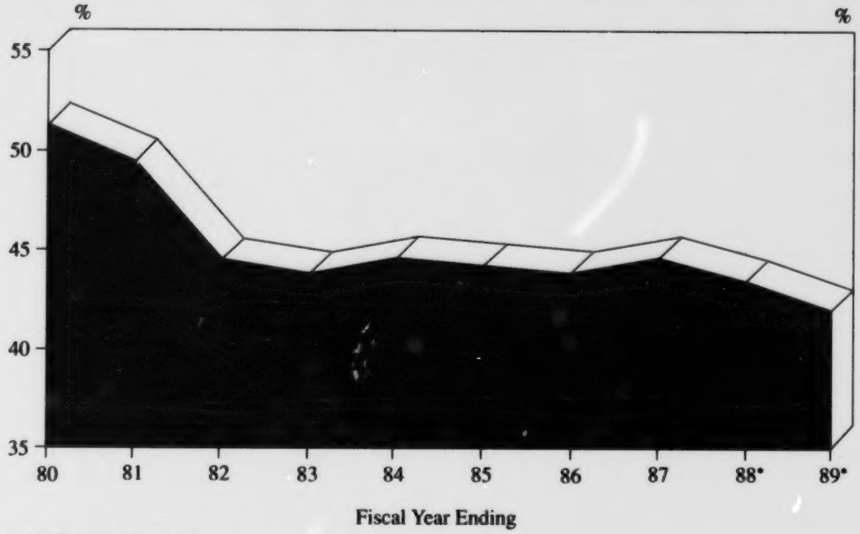
[31] Institute for Health Care Facilities of the Future, **Fiscal Federalism from the Perspective of Nova Scotia.**

Figure 2.17

Federal Contributions as a Percentage of Nova Scotia Health Expenditures



Source: HEALTH & WELFARE CANADA

* Preliminary

6. HEALTH STATUS

The Royal Commission reviewed health status indicators compiled for Nova Scotia and five other provinces — New Brunswick, Prince Edward Island, Newfoundland, Manitoba and Saskatchewan — and for Canada as a whole.[32] In this section, available measures of health, though mostly limited to measurements of illness, are reviewed. These include life expectancy, death rate, causes of death, potential years of life lost, and disability. Some data comparing determinants of health, i.e., lifestyle behaviours and risk factors, are also presented.

Over the last two decades there has been a shift in the pattern of diseases, and a consequent shift in the definition of health. Major causes of illnesses are no longer dominated by infectious diseases but are more often attributable to chronic disease, disability, and emotional stress. Health is no longer viewed as just the absence of disease. Health results from a combination of factors which provide people with beneficial living conditions.

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32. Information in this section is based on a study prepared for the Royal Commission on Health Care by the Institute for Health Care facilities of the Future, **Health Status Indicators and Demographic Trends for Nova Scotia.** This study is published in Volume I of the Research Studies of the Royal Commission.

This evolving definition of health requires a better understanding of the determinants of health and the means of measuring it. Rather than designating health by measures of morbidity and mortality, i.e., sickness and death, positive indicators of health must be developed and refined. Indices of health could then be used to find ways of preventing sickness and promoting health and to establish goals for public policy that would link the delivery of health care services to these goals.

Life expectancy at birth is a widely used indicator for inter-provincial and international comparisons of the health status of populations. Canada's life expectancy rates fall within the mid-range when compared with those of other countries belonging to the Organization for Economic Co-operation and Development. Males and females in Nova Scotia have a relative disadvantage in life expectancy at birth compared to the provinces of New Brunswick, Prince Edward Island, Newfoundland, Manitoba and Saskatchewan, and Canada as a whole. The most recent data, from 1980-82, put Nova Scotian life expectancy at 70.9 years for males and 78.3 years for females. The national averages are 71.8 and 78.9 respectively. This relative disadvantage also appears for life expectancy at the ages of 65, 75 and 85. Unfortunately, existing data cannot be used to adequately assess the quality of life remaining at these ages, a factor which is an important part of the emerging definition of health.

Declining death rates are generally consistent with gains in life expectancy. Over the last sixty years, death rates have been significantly reduced in Canada. Comparisons among countries belonging to the Organization for Economic Co-operation and Development found Canada's total mortality rate below the average rate (762 versus 855 deaths per 100,000), similar to Sweden, Norway, Iceland and the Netherlands.[33]

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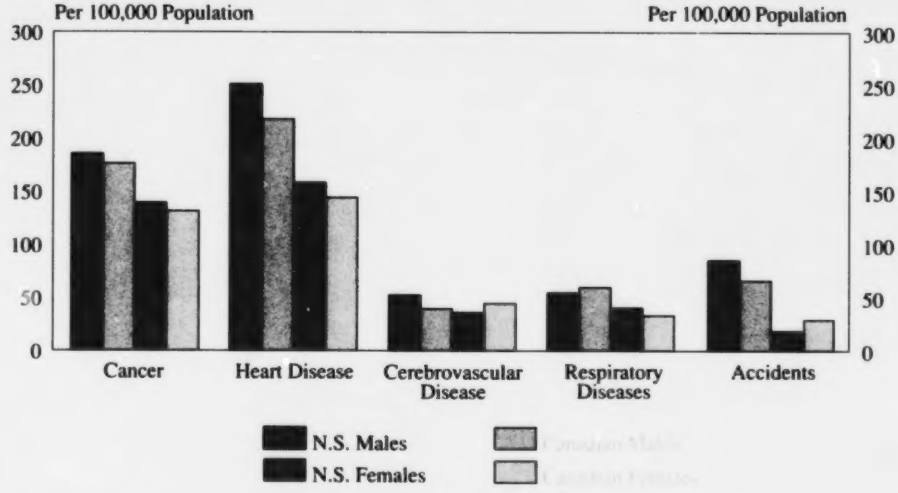
[33] Organization for Economic Co-operation and Development, **Financing and Delivering Health Care: a Comparative Analysis of OECD Countries** (Paris: 1987).

Figure 2.18

Age Standardized Death Rates by Leading Causes, Nova Scotia and Canada 1986



Source: STATISTICS CANADA

While Nova Scotia has followed the Canadian trend towards reduced death rates, Figure 2.18 shows male death rates in Nova Scotia to be above the national average for four of the leading causes of death in Canada — heart diseases, cancers, accidents, and cerebrovascular diseases. Female death rates in Nova Scotia are above the national average for three of the leading causes of death — heart diseases, cancers, and respiratory diseases.[34]

Potential years of life lost is a measure of premature death. It is significantly higher for males than females, reflecting higher death rates at earlier ages among men.[35] Between 1979 and 1983, Nova Scotia ranked third, behind the Yukon and Northwest Territories, in the largest number of premature deaths as a percentage of all deaths. Almost half of all the potential years of life lost between 1982 and 1986 for

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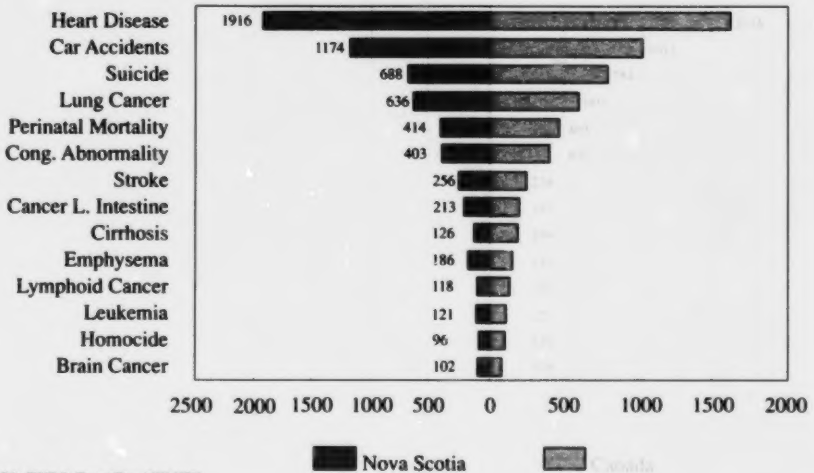
[34] Statistics Canada, **Mortality Summary List of Causes, Vital Statistics Volume III** (Ottawa: 1986).

[35] Perinatal mortality has a major impact on Potential Years of Life Lost, not because of an unusually high infant mortality rate, but because it represents a maximum number of potential years lost.

Figure 2.19A

Potential Years of Life Lost/Leading Causes of Death - Males Under 75*



* 1982-86, PYLL Rate Per 100,000
Source: HEALTH & WELFARE CANADA

males in Nova Scotia was caused by heart disease, car accidents, suicide, lung cancer and perinatal mortality. The leading causes for females were heart disease, congenital abnormalities, breast cancer, car accidents and perinatal mortality (see Figures 2.19A and 2.19B).[36] These causes of death are typically related to a combination of lifestyle, environmental, and genetic factors.

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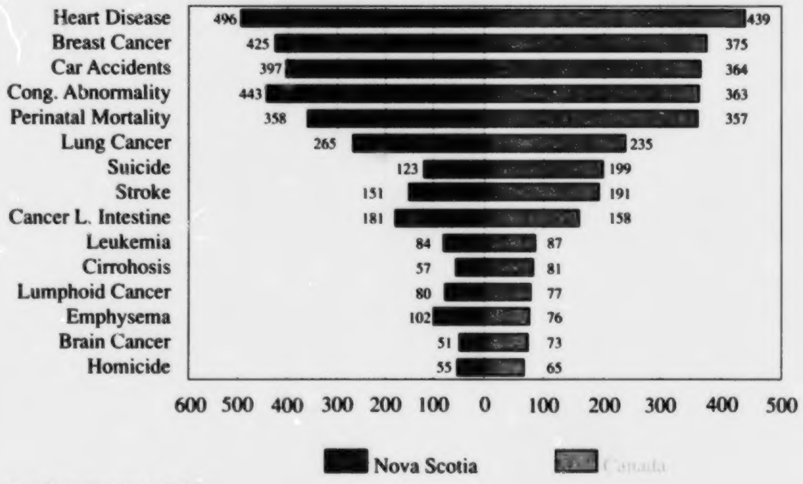
[36] Health and Welfare Canada, **Chronic Diseases in Canada,** Volume 9, Number 6 (Ottawa: November 1988).

Figure 2.19B

Potential Years of Life Lost/Leading Causes of Death - Females Under 75*



* 1982-86, PYLL Rate Per 100,000
Source: HEALTH & WELFARE CANADA

Information on disability is another indicator of health status. Figure 2.20 reports some findings of the 1984 Canadian Health and Disability Survey. Ninety-seven thousand Nova Scotians over the age of fourteen were disabled, with 39,000 Nova Scotian seniors reporting having some type of disability.[37] This figure represents 14.9 per cent of the population and is two percentage points above the national average. Only Nova Scotians under the age of thirty-five compare favourably with other Canadians. In the Atlantic region, as in the rest of Canada, a larger proportion of disabled people live in rural areas. Even though disability data can be fairly subjective, these findings pose major implications for planning tomorrow's health services.

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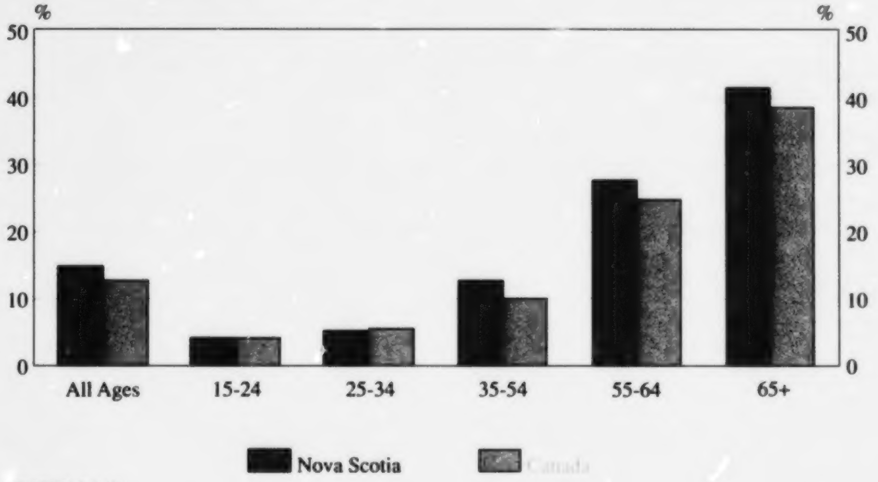
[37] Statistics Canada, **Report of the Canadian Health and Disability Survey, 1983-1984** (Ottawa: 1986).

Figure 2.20

Percentage of Disabled Persons by Age
Nova Scotia and Canada 1983-84



Source: STATISTICS CANADA
REPORT OF THE CANADIAN
HEALTH & DISABILITY SURVEY

As already mentioned, lifestyle is a significant factor contributing to the leading causes of death and illness. Health problems such as heart disease, cancer, accidents, respiratory diseases and mental disorders are associated with smoking, alcohol consumption, nutrition, stress levels, and physical activity. The 1985 Canada Health Promotion Survey indicated that people between the ages of 25 and 64 in Atlantic Canada appear to be at greater risk of cardiovascular disease than elsewhere in the country.[38] The Atlantic region also compared poorly in terms of those reporting high blood pressure, smoking, obesity, and low rates of physical activity. The female population in Nova Scotia was found to have a high percentage of regular smokers and to consume more alcoholic drinks per week than the national average. On average, however, the proportion of persons in Nova Scotia reporting frequent drinking and driving after drinking was amongst the lowest in the country.

Lifestyle behaviours among youth can be expected to affect demand for future health care resources. In Nova Scotia, 26 per cent of Grade 10 students smoke cigarettes, close to the national average.[39] Alcohol consumption among young

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38. Institute for Health Care Facilities of the Future, **Health Status Indicators and Demographic Trends for Nova Scotia,** and Health and Welfare Canada, **Canada's Health Promotion Survey: Technical Report** (Ottawa: 1988).
39. Information in this section is drawn from a study by the Queen's University Social Program Evaluation Group, **Canada Health Attitudes & Behaviours Survey 9, 12 and 15 Year Olds 1984-85: Nova Scotia Report** (Kingston: 1985).

Nova Scotians tends to be lower than national levels: 26.9 per cent drink two to three times a month. Another 4.6 per cent drink at least 2 to 3 times per week. The corresponding national figures are 32.0 and 10.2 per cent, respectively. Cannabis use among Grade 10 students is also below the national average: 6 per cent use it 2 to 3 times per month and 4.8 per cent use it at least 2 to 3 times per week. The national figures are 7.1 and 5.5 per cent, respectively.

This study survey also identified that Nova Scotia had a higher proportion of students at all three grade levels who indicated a lack of self esteem, and who expressed indications of emotional stress. In its section on "Views on Self and Others", it concludes that "In general, the self-esteem and mental-health of Nova Scotia's young people seems to be an area of concern".

In general, young Nova Scotians are similar to their counterparts in the other provinces with respect to levels of physical activity, but the percentage of overweight children was significantly higher (10.4 versus 7.1 per cent). A 1989 Canada Youth and AIDS study reports Nova Scotia youths as being more sexually active and at risk for unwanted pregnancies, sexually transmitted diseases, and AIDS than young people in other parts of Canada.[40] This study also found that Nova Scotian youths know more about AIDS than do young people in other parts of Canada but have not changed their behaviour to minimize risks. Health promotion and illness prevention programmes should be directed at this segment of the population engaging in activities that may have negative health consequences.

It is important when analyzing lifestyle data to keep in mind the social, economic, and environmental basis of lifestyle. Although individuals must take some responsibility for their own health, the pitfalls of blaming victims for factors largely beyond their control must be avoided. Several health studies in Nova Scotia demonstrate that health status differs regionally and between socio-economic groups in the population. Government attempts to improve the health of the population must take into account factors such as unemployment, education, and environment, which are often beyond an individual's control. These factors should be considered in the formulation of a comprehensive approach to health policy.

While measurement of health status needs to be further developed and refined, this initial overview indicates that Nova Scotians are not particularly healthy when compared to the residents of the other provinces. As outlined above, Nova Scotia has the highest per capita health spending of the Atlantic provinces but it does not rank as favourably with regard to the health status of its population.

Survey results indicate a high propensity among Nova Scotians to make lifestyle changes to reduce problems of hypertension and poor nutrition. During the Public Hearings, the Royal Commission heard calls for improved public education with regard to nutrition. Survey results in this area have indicated that nutrition programmes directed to young mothers resulted in improved health status for newborns. Nutrition studies in the United States have established a strong relationship between regular seafood consumption and a lower incidence of cardiovascular

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40. Queen's University Social Program Evaluation Group, **Canada Youth and AIDS study: Nova Scotia Report** (Kingston: 1989).

disease. Other opportunities for health promotion are in the workplace, which a majority of wage earners believe to be an appropriate place for such activity. Some preventive measures, such as the use of seat belts, are widely practiced by Nova Scotians.

Government can support the population in making healthy life choices by placing greater emphasis on illness prevention and health promotion policies, and by implementing appropriate policies and programmes directed at the social, economic, and environmental causes of illness, as part of an integrated approach to health.

7. DEMOGRAPHIC AND SOCIETAL CHANGES

Demands made on the health sector are determined to a great extent by the character, structure, and expectations of the population it serves. Universal publicly-funded medical insurance has become an accepted and expected part of the social welfare network in Canada. Historically, the objective of health policy has been to guarantee universal and equitable access to medical services in all regions of the country. The provision of universal health care has led to the increased use of the health care system and a widespread expectation that people are entitled to high quality health care.

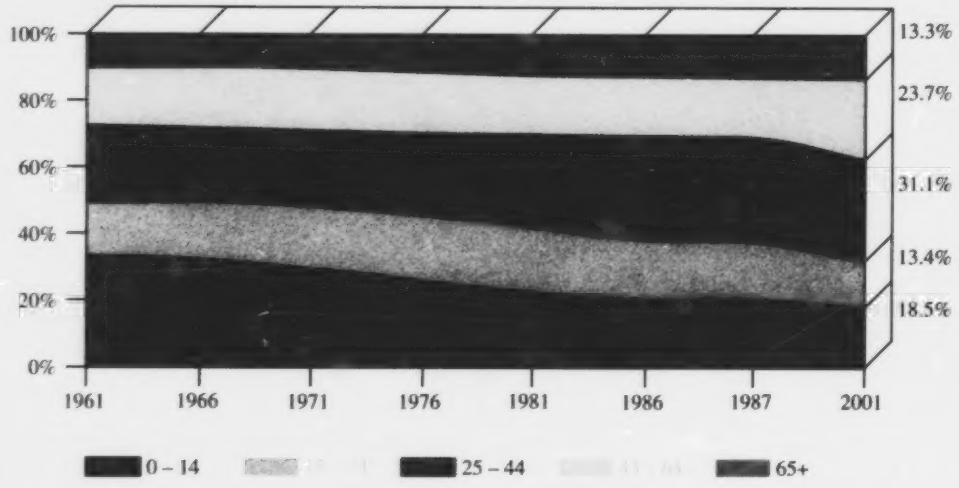
Between 1961 and 1987, Canadians over 65 years of age have increased from 7.6 per cent of the population to 10.9 per cent. At the same time, there have been decreases in the proportion of children. The group comprising those aged 0 to 14 years made up 33.9 per cent of the total Canadian population in 1961 and dropped to 21.2 per cent in 1987. Similar trends are evident in Nova Scotia, with 12.1 per cent of the population in the elderly category in 1987 and 21.1 per cent in the children category.

Several factors contributing to this "greying" trend are lower fertility rates, international and inter-provincial migration, and longer life expectancy. Since the 1960s, fertility rates have dropped to below replacement level in most provinces, due largely to increased employment rates among women, changes in marriage and divorce rates, and fewer unwanted pregnancies. In Nova Scotia, the current fertility rate is 1.7 live births per female.

Projections for moderate population growth assume a stabilization in fertility rates, a continuation of international and national migration trends, and increased life expectancy (see Figure 2.21). The resulting prospect for Nova Scotia is a population growth rate of 6 per cent between 1986 and 2006, with a 65 per cent increase in the 45 to 64 year old age group and a 30 per cent increase in the proportion of the population over 65.[41] This would put the proportion of the elderly population at 14.4 per cent of the total. Over the longer term, as the "baby-boom" generation ages, the proportion of the population over age 65 will increase dramatically.

Figure 2.21

Demographic Trends in Nova Scotia
1961-2001



Source: STATISTICS CANADA (actual)
DPA Group Inc. (projected)

The increased proportion of elderly will undoubtedly have an impact on the types of health care and social services required, as well as on the productive population's ability and financial capacity to support its dependents. Whether or not there will be a significant increase in health care costs as a result of the changes in the age

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41. Statistics Canada, **The Nation: Population and Dwelling Characteristics — Age, Sex and Marital Status** (Ottawa: 1987); Statistics Canada, **Post-Censal Annual Growth Estimates of Population by Marital Status, Age, Sex and Components of Growth for Canada, Provinces, and Territories** (Ottawa: 1988); DPA Group Inc., **Population, Households, and Families, Projections, Nova Scotia Counties and the Halifax-Dartmouth Census Metropolitan Area 1987-2006** (May 1989).

structure of the population is a matter of current debate. Projections range from an annual average increase of one to two per cent in health care expenditures attributable to the effects of population growth and ageing.[42]

Changing social roles, attitudes, and living arrangements are also affecting the provision of support and services to both the very young and the very old. These changes include the growth in the number of females in the labour force, in the number of single parent families, and in the number of childless couples. Care by family members of the dependent groups of the population may decline as the traditional family unit and the social roles of males and females change. The impact of these changes on the living arrangements for seniors will be an important factor in future planning for their service needs.

The rates of institutionalization of the elderly among countries belonging to the Organization for Economic Co-operation and Development range from a low of 4.5 per cent in the Federal Republic of Germany to highs of 10.5 per cent for Sweden and 10.9 per cent for the Netherlands. At 8.7 per cent, Canada has a relatively high rate of institutionalization of its elderly. Considering medical institutionalization only, Canada reported the highest rate at 7.1 per cent next to Germany at 5.3 per cent.[43] At the same time, Canada has a younger population than many European countries. In Nova Scotia, the percentage of the elderly living in medical institutions rises rapidly for those over 75 years: 11.9 per cent versus 2.4 per cent of those aged 65 to 74.

Trends in population growth and composition, and changes in lifestyles and attitudes are expected to have implications for health care services, expenditures and financing. The ageing population will likely affect the tax base of the province, as a large proportion of the population retires and contributes less to tax revenue. As well, these changes will likely increase demands on many areas of the province's social spending.

8. THE NEED FOR CHANGE

The provision of universal health care has benefited the people of Nova Scotia, but has also led to undue expectations of unlimited health care services. The Province's ability to pay for all its social services could be compromised by a forecast of slower economic growth, reduced federal contributions and an increase in the proportion of its dependent population. The provincial fiscal situation, the health of the population, and society's expectations all signify an urgency to develop health policies and planning processes that are responsive to the needs of Nova Scotians.

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[42] Institute for Health Care Facilities of the Future, **Health Status Indicators and Demographic Trends for Nova Scotia** (Ottawa: 1989).

[43] Organization for Economic Co-operation and Development, **Financing and Delivering Health Care: a Comparative Analysis of EOCD Countries** (Paris: 1987).

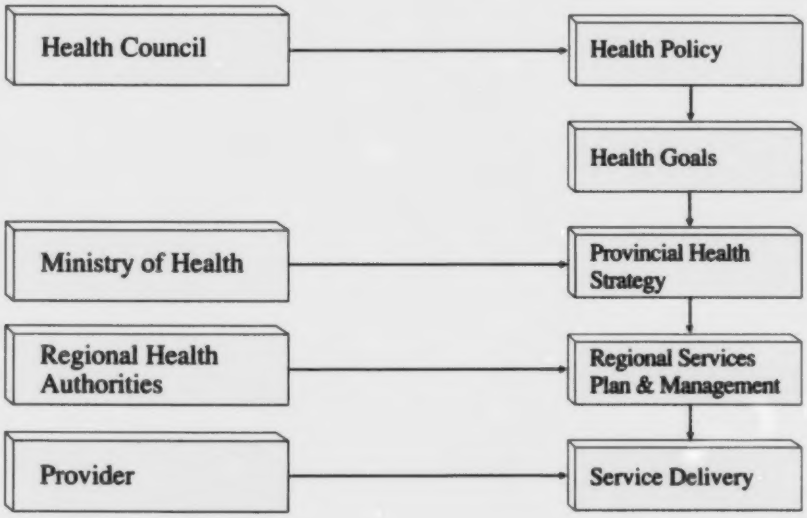
CHAPTER III
A NEW PLANNING DYNAMIC

INTRODUCTION

A shift in government policy on health is central to any meaningful changes to improve the health system. In this Chapter the Royal Commission recommends a new planning dynamic for attaining responsive and responsible administrative processes and structures. In keeping with its Guiding Principles, the Royal Commission envisions a participatory and decentralized administrative structure, comprising a Provincial Health Council, a re-organized Ministry of Health, Regional Health Authorities and provider groups. These recommendations will require significant alteration, both at the regional and provincial levels, in the present relationships between government and the people who provide and use health services, as figure 3.1 illustrates.

Figure 3.1

A New Planning Dynamic


Health Council
Health Policy
Health Goals
Ministry of Health
Provincial Health Strategy
Regional Health Authorities
Regional Services Plan & Management
Provider
Service Delivery

Government will play a central role in this new planning dynamic. It is important to realign structures in order to manage this process effectively. This realigned structure is symbolized in the name of the resulting new entity called the **Ministry of Health**. Steering the system to its new course will require a high degree of vision and commitment on the part of policy makers. Many of the steps proposed are designed to promote development of the long-term strategy, while others affect more immediate changes. All will require careful planning and management at both the local and provincial levels.

I. COMPREHENSIVE HEALTH POLICY

The Royal Commission is proposing a new approach to health policy which will be referred to in this Report as a **Comprehensive Health Policy.** A Comprehensive Health Policy is a public policy supportive of the attainment of health. It is based on the following principles:

1. **Equity**
Every member of society must have equal opportunity for achieving and maintaining good health.
2. **Participation**
All concerned parties must have the opportunity to participate in the planning for new health policies.
3. **Intersectoral Approach**
Planning must involve the recognition that public health is affected by many different factors; it is, for example, improved by economic well-being and adversely affected by unemployment and poverty.
4. **Ecological Perspective**
Health must be viewed from a broad perspective — one which includes, among others, environmental and social considerations.

In recommending a Comprehensive Health Policy, the Royal Commission has been concerned with the determinants of health as opposed to the consequences of ill health. Basic to this policy is the belief that citizens, municipalities, industry and government departments all must become involved in health issues, in view of the fact that so many different aspects of contemporary living affect health.

The Royal Commission's recommendations are based on the belief that people should not be passive recipients of health care, but active partners in achieving and maintaining personal and community health. Professionals within the health system must view people who use this system as partners in the managing of health care and in the improvement of individual and collective health.

The Royal Commission urges government to commit itself to this Comprehensive Health Policy. It is essential that an intersectoral approach to health policy development and expenditures be fostered through the coordination and participation of all relevant government departments.

Due to their complex and interdependent nature, such policies take time to yield tangible results. The Royal Commission is, therefore, proposing both immediate and long-term recommendations to move towards this new orientation.

The Royal Commission, therefore, **RECOMMENDS:**

3.01 That the Government of Nova Scotia formally adopt a broad definition of, and commitment to, health based on the principles of a Comprehensive Health Policy.

3.02 That the Government of Nova Scotia, through the Provincial Health Council and Ministry of Health, develop provincial health goals based on the principles of a Comprehensive Health Policy.

3.03 That the Ministry of Health disseminate, at periodic intervals, pertinent public information on health status and health surveys, so as to enable individuals and groups to make informed choices about health policies, programmes and options.

2. HEALTH COUNCIL

To increase public involvement in health planning, the Royal Commission is proposing the creation of a **Provincial Health Council**.

The role of the Health Council would be as follows:

(a) to advise government on the Provincial Health Policy and Goals;

(b) to provide for broad involvement by the public in the development of a Comprehensive Health Policy; and

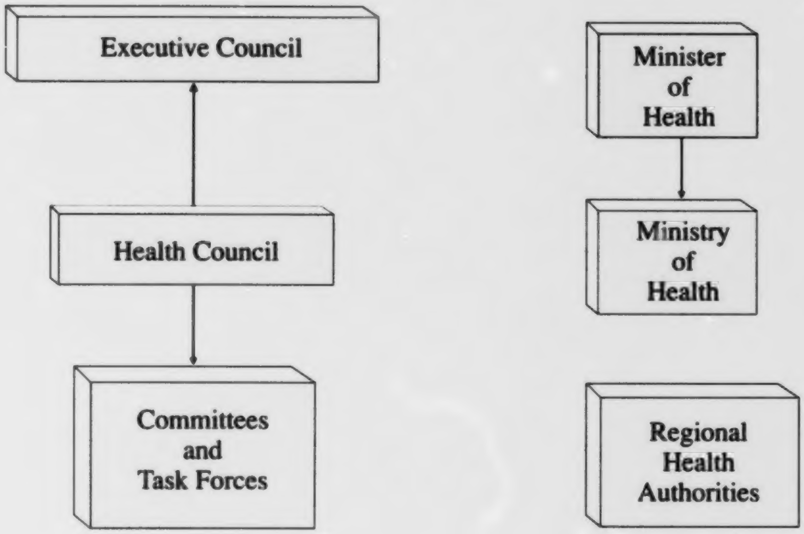
(c) to monitor, assess, and report on the performance of the health system.

The Council would replace current advisory groups, as well as the Health Services and Insurance Commission and the Commission on Drug Dependency. Committees or task forces of the Health Council will be established, as needed, to deal with specialized issues, such as nursing, physicians, and drug dependency, and draw in required technical expertise from the Ministry of Health. In view of their fundamental importance to the design of the new Strategy for Health, there will be two standing committees of the Provincial Health Council: **Ethics** and **Technology Assessment.**

The overall size of the Council must be kept to a workable number of approximately ten to twelve members. It should be composed of qualified individuals selected on the basis of competence and demonstrated leadership. No organization or group should have a presumed right to be represented on the Council. Members would **NOT** serve as representatives of specific organizations or interest groups.

Figure 3.2

Health Council Structure



The Royal Commission envisages the Health Council providing province-wide, community-based participation in the planning and policy development process. To ensure the highest visibility and as a function of its intersectoral nature, the Health Council should report to the Executive Council — i.e., Cabinet — and act in an advisory capacity to the Minister of Health.

To carry out its mandate effectively and independently, the Council should be financed in the same manner as a separate department, under Cabinet Secretariat, and not be dependent on the Ministry of Health for funding or staff. The Council must be able to exercise independence in determining its agenda. Government will ensure the Council has access to all information it requires in order to exercise its responsibilities. Appropriate links with provincial and regional information systems, upon which policy is built, must be established.

The role and terms of reference of the Health Council must promote a multi-disciplinary approach to developing policy and monitoring the health system and health status of Nova Scotians. An initial undertaking of the Health Council will be to advise government on the development of provincial health goals to guide policies that will serve the health needs of the population.

The Health Council will continuously monitor the impact of these policies. It will report its findings on a public basis in an **Annual Report**. This assessment should incorporate health status measurements, health surveys, and evaluations of the health systems. The Health Council's annual review will include value-for-money audit, comprehensive audit and evaluations of special projects.

The immediate appointment of a Provincial Health Council will indicate government's commitment to fundamental change and enhancement of Nova Scotia's health system.

The Royal Commission **RECOMMENDS:**

3.04 That the Government of Nova Scotia immediately appoint a Provincial Health Council, which will report to the Executive Council, and provide advice to the Minister of Health.

3.05 That the role of the Health Council be:

(a) to advise government on a Provincial Health Policy and Goals;

(b) to provide for broad involvement by the public in the development of a Comprehensive Health Policy; and

(c) to monitor, assess, and report on the performance of the health system.

3.06 That the Health Council immediately initiate a participatory process to develop Provincial Health Goals, which will form the basis for the province's Strategic Plan and all health service programmes.

3. THE MINISTRY OF HEALTH

Responsibility for health programmes currently rests with three government agencies. These are the Department of Health and Fitness, the Health Services and Insurance Commission, and the Commission on Drug Dependency. The Royal Commission has observed that this segregation of responsibilities fragments planning and policy development and complicates coordination of operations. The Royal Commission believes that the integration of these three agencies into a single **Ministry of Health** is critical to strengthening the administration of the health care system. A unified structure will address planning and policy development for the full comprehensive range of health services. In keeping with the Royal Commission's proposal for regional administration, the reorganized Ministry of Health's principal role would lie in the development of the **Provincial Health Strategy**. This strategy would flow from the Provincial Health Policy and Goals established by the Health Council. The new regional administration, to be discussed in the next section, would assume primary responsibility for management of service delivery. In addition to medium and long-term strategic planning, the new streamlined Ministry would also be responsible for setting standards and guidelines, quality assurance, programme evaluation and monitoring of health outcomes.

The Health Services and Insurance Commission currently has responsibility for administering the Medical Services Insurance programme, and other insured services such as Pharmacare, special drug programmes, the children's dental programme, and the Ambulance Subsidy programme. All of these programmes operate on a fee-for-service basis to health service providers.

Maritime Medical Care Incorporated benefits from a special statutory and contractual relationship with the Minister of Health and with the Health Services and Insurance Commission for managing Medical Services Insurance programmes. It also performs claims processing for certain aspects of the Hospital Insurance Plan and operates the Prescription Drug Programme of the Department of Community Services. Over the years, the government has relied relatively heavily on Maritime Medical Care to help define policies and procedures for Medical Services Insurance programmes.

The research and statistics section of Maritime Medical Care is often called upon to conduct analyses on matters relating more to policy than to administrative procedures. Maritime Medical Care is frequently a policy advisor to government, and not simply an administrator, as the Health Services and Insurance Commission has, until recently, lacked any capacity to perform its own research. Under the current arrangement, the Department of Health and Fitness must formally approach the Health Services and Insurance Commission for specific data required for research, which, if granted, would be supplied by Maritime Medical Care. Policy coordination and information links among the three agencies are, therefore, quite weak.

A restructured Ministry of Health necessarily calls for a reassessment of Maritime Medical Care as administrator of the Medical Services Insurance Plan. In the Royal Commission's opinion, Maritime Medical Care holds too broad an interpretation of what is entailed in programme administration under its agreement with the Minister of Health. Practice profile reviews and utilization analyses tend to be undertaken by Maritime Medical Care for limited audit purposes, rather than for policy purposes.

To ensure policy coordination, the auditing, research and analysis responsibilities must be transferred from Maritime Medical Care to the Ministry of Health. Within the broader mandate of the Ministry, these functions would focus more on analysis related to the challenge of delivering appropriate cost-effective quality care. Maritime Medical Care would continue to be contracted with for the administration of Medical Services Insurance programmes.

The Royal Commission contends that the current split between the Department of Health and the Health Services and Insurance Commission weakens government's ability to plan and manage the overall health care budget and fragments the policy development process. The key area of physician manpower planning is one where effective policy implementation requires close coordination and cooperation. The Health Services and Insurance Commission is primarily concerned with fee-for-service payments and does not address broader concerns of supply, distribution, or alternate modes of remuneration. Management of physicians' payments, as with other Medical Services Insurance programmes, must be considered in a broader health policy context, and not treated as mere payment administration processes.

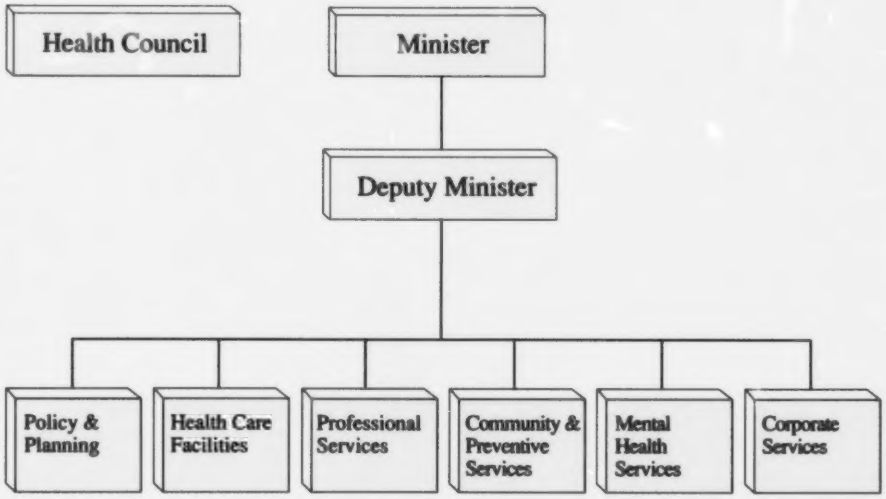
Creation of this broader context is made possible by merging the functions of the Health Services and Insurance Commission with those of the Department. Policy development and management of all health programmes would be administered by one central agency, the Ministry of Health. Information would move freely between sections of the Ministry, allowing for development of linked systems, and enabling it to identify and address emerging trends and issues.

While the Royal Commission can unreservedly recommend the immediate dissolution of the Health Services and Insurance Commission and the amalgamation of its staff into the Ministry of Health, it believes that the integration of the Commission on Drug Dependency should proceed more cautiously. The Commission on Drug Dependency's drug and alcohol rehabilitation programmes are fashioned from a community development model — an approach which the Royal Commission considers valuable and would like to see emulated within the new Ministry. Care must be exercised to preserve the best of the Commission on Drug Dependency approach, while allowing for coordination of policy and programmes within the Ministry. The administration of drug dependency programmes will be managed at the regional level.

The Royal Commission considers it imperative that the Ministry's research, policy and planning function be strengthened and upgraded. A **Policy and Planning Division**, reporting directly to the Deputy Minister, should be redefined within the

Figure 3.3

Ministry of Health Structure


Health Council
Minister
Deputy Minister
Policy & Planning
Health Care Facilities
Professional Services
Community & Preventive Services
Mental Health Services
Corporate Services

Ministry. This Division would ensure the coordination of all policy development and planning within the Ministry and link research to policy efforts at all levels.

The programme areas within the Ministry of Health will consist of the following divisions: **Professional Services, Health Care Facilities, Mental Health Services, and Community and Preventive Services**. In addition to administering the Medical Services Insurance programmes, Professional Services would manage relations with all health care professional groups. Health Care Facilities, Mental Health, and Community and Preventive Services would engage in long-term planning and programme development activities within their respective areas. **Corporate Services**, as an administrative support division, would include Human Resource Development, Finance, and Public Affairs.

Information systems are a prerequisite for accountable management. The new planning dynamic will not be able to achieve optimum results if the current information systems are not changed. A fundamental revamping, consolidation, and general improvement of all means of obtaining health information will be essential in order to accurately focus on health outcomes. Although a significant investment on the part of government will be required, it is anticipated that high dividends in more effective management and planning will be obtained.

A fundamental concept of the proposed reorganized Ministry structure is participatory management. The Deputy Minister, meeting regularly with senior management staff of the Ministry, will develop the Strategic Plan and objectives, allocate resources to the regions and monitor regional operations. In an effort to keep programmes and policies effective and relevant, the senior management team will review the ongoing evaluations performed by the Policy and Planning Division.

While the Ministry of Health must improve its research capabilities and information systems, the Royal Commission believes that investment in a multi-disciplinary, university-based, **Health Policy and Management Research Centre** is essential for a revitalized policy and planning effort. While such a Centre would be expected to seek external research grants, basic funding for the core research and administration should come from an ongoing contract with the Ministry of Health. Research priorities will be jointly established, and it is expected that the Centre would draw on the social science and management expertise of the universities throughout the Maritimes.

Timely access to appropriate information is a first step. Effective and accountable management presumes competent and well trained management personnel. A cadre of qualified senior and middle management, committed to a broad vision of a provincial health care system, must be developed. An extensive review of the training and compensation of management needs to be undertaken in order to determine the qualifications and competitive salaries required to attract qualified managers to the system, both within and outside the provincial civil service.

The Royal Commission, therefore, **RECOMMENDS:**

3.07 **That the Government of Nova Scotia merge the Department of Health and Fitness, the Health Services and Insurance Commission, and the Commission on Drug Dependency into an integrated "Ministry of Health".**

3.08 That the Government of Nova Scotia transfer to the Ministry responsibility for the policy, analysis and research functions presently carried out by Maritime Medical Care Incorporated for Medical Services Insurance programmes, alter the contract with Maritime Medical Care Incorporated accordingly, and amend the legislation to remove specific reference to Maritime Medical Care Incorporated.

3.09 **That the Government of Nova Scotia and Dalhousie University jointly establish, under the aegis of the Faculty of Health Professions, a Health Policy and Management Research Centre to undertake, on a contractual basis, health surveys, evaluations, research projects, and planning studies. The other Atlantic provinces should be invited to join in establishing and funding this Centre.**

3.10 That the Ministry of Health improve and update its information systems so as to provide a solid foundation on which to base policy development, comparative studies and evaluations.

3.11 That the Government of Nova Scotia emphasize human resource development. That it undertake a review of compensation policies for senior and middle management to ensure Nova Scotia can attract and retain the best possible health administrators.

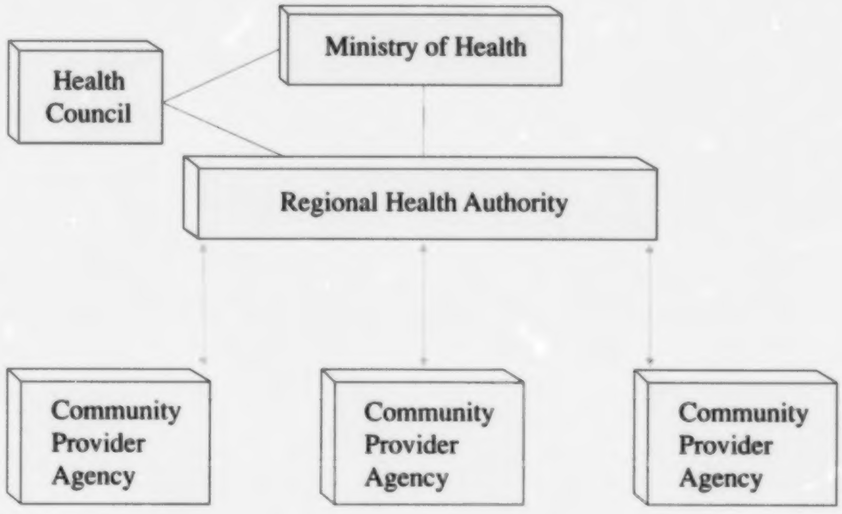
3.12 That professional training and continuing education be provided so as to reorient Ministry of Health personnel to health promotion and community development.

4. REGIONAL HEALTH AUTHORITIES

On the basis of the Public Hearings and consultations with a wide range of people from the health field, the Royal Commission has concluded that **decentralization of government functions and delegation of authority to the regions are integral to effective management and efficient delivery of health services**. Regional administration of services would overcome fundamental systemic weaknesses in health care delivery in Nova Scotia. The Royal Commission believes that responsiveness and flexibility in service delivery are best achieved when planning and management of services are placed closer to consumers. It is anticipated that

Figure 3.4

Regional Health Authority Structure


Ministry of Health
Health Council
Regional Health Authority
Community Provider Agency
Community Provider Agency
Community Provider Agency

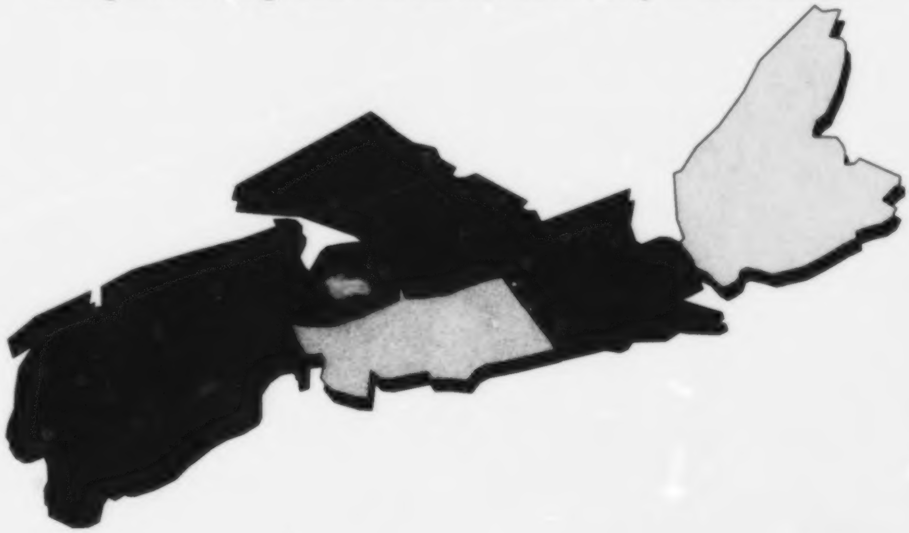
regional administration will improve the quality and distribution of services, and effectively address current duplication. The Royal Commission proposes the creation of **Regional Health Authorities** which would be responsible for the planning and management of the full complement of health services and programmes delivered within their regions.

The Health Council will function as an advisory resource in the establishment of Regional Health Authorities. For appropriate continuity and links, it will regularly communicate with, and have access to, the Regional Health Authorities for any information it may require. In accordance with the Provincial Health Council's Policy and Goals, and the Ministry's Strategic Plan, the Regional Health Authorities will develop the **Regional Services Plan**, which will detail the type, mix and scope of health services to be offered within the respective regions.

The establishment of Regional Health Authorities is predicated on a reduced number of administrative regions in the province. The Royal Commission has observed that the existence of far too many regions unnecessarily complicates service delivery. Currently, Community Services, drug dependency programmes, Health Care Institutions, and Community Health Units do not share the same boundaries, thereby weakening the province's ability to effectively plan and coordinate all health services. Most of the nine hospital regions lack sufficient population to support a wide range of specialized medical services on a twenty-four hour basis. Rationalized regional boundaries should also redistribute some medical

Figure 3.5

Proposed Regional Health Authority Boundaries



specialty services outside of the Halifax-Metro area, and provide for an adequate population base to support these services. The Royal Commission suggests four regions, as illustrated in Figure 3.5, but in view of the complexity of this issue, and to promote community participation in defining the new regional boundaries, it is recommended that a task force of the Health Council draw a new administrative map for health care services taking into account population, traditional referral patterns, and other factors.

Although the services currently available in the existing regions are generally of an acceptable standard, the lack of systematic planning has resulted in poor service distribution and weak co-ordination. The regions would be allocated resources on a capitation basis, according to population, demographics and health status. Regional services will not be concentrated in one designated centre or "regional hospital", but may be based in any facility or combination of facilities within a region. The concept of regional services is consistent with the emphasis the Royal Commission wishes to see placed on **health outcomes**, rather than "inputs", such as facilities and beds. Each Regional Health Authority will allocate its resources to the particular mix of health care programmes that, in its judgment, best meets regional needs and priorities, in accordance with provincial guidelines.

Regional programming will allow for health services to be planned, organized and managed on a regional basis within the framework established by government. Each Regional Health Authority will develop its Regional Services Plan for health programmes based on regional and local priorities. Beginning with an assessment of local needs, it will set priorities for health services and determine the range, extent and quantity of health services offered in its jurisdiction. Regional priorities will be decided through a participatory process, involving local health care providers, communities, and voluntary agencies. Decisions affecting service delivery will thus be made much closer to the consumer of the service. On the basis of the Regional Services Plan, the Regional Health Authority will then enter into and manage contracts for services from agencies such as hospitals, physicians, and community health organizations. As a contractor, the Regional Health Authority will not itself provide health services directly to the community. The Regional Health Authority will evaluate and be held accountable to the Minister of Health for the effectiveness of health services in its area.

Each Regional Health Authority must be an autonomous entity, external to government, with a Board responsible for health care services throughout its region. Comprising sixteen to nineteen members, the Regional Health Authority Board will require qualified and committed community members to perform the dual roles of public trustee and organization governor. Membership on these bodies would consist of consumers and providers of health care at the community level. The Regional Health Authority must represent a variety of approaches and concerns and must promote broad-based public participation of their constituencies, allowing for opportunity of access by a variety of interests. It must carefully consider and manage regional services in an open manner. In view of the importance of participatory regional management, the Provincial Health Council will assist government with the definition of guidelines and mechanisms with respect to the nominating process for regional board members.

Each Regional Authority will appoint a Chief Executive Officer, subject to Order-in-Council confirmation. The Chief Executive Officer and staff will carry out the management functions of the Authority and monitor contracted services. Effective delegation requires accountability and competent management.

It is anticipated that the Regional Health Authorities will plan for and administer the **full range of health services for a given region**. In that event, the Ministry of Health would then transfer funds to the regions for all health services to be offered within the region, from Community Health programmes to institutions, in accordance with the funding formula calculated on a weighted capitation basis (for a detailed description, refer to Chapter VI). While the population-based funding formula will determine the allocation of resources to each region, each Regional Health Authority will exercise discretion in the management of its funds in accordance with its Regional Services Plan. However, any major action on the part of a Regional Health Authority, such as the decision to close hospitals, must receive official Ministry of Health approval.

Regional services administration and funding, as novel approaches to health care delivery, will require gradual evolution and adjustment. Certainly, some regions will be in a position to implement this process more rapidly than others. Government might consider, for example, beginning the process by establishing the Halifax Regional Authority in 1990, following with the other regions in 1991.

The Royal Commission believes that this move to regional authorities, by decentralizing the health care system and effectively linking operations with planning, will significantly improve the quality of health services offered to Nova Scotians. It will allow for local participation in addressing community needs and promote greater flexibility and responsiveness. Rationalization, coordination, and integration of the full range of health services will be realized through common administration, policy and decision-making. All health programme expenditures will be managed by the regions, tying funding to population needs and promoting effective use of resources.

The Royal Commission, therefore, **RECOMMENDS:**

3.13 That the Health Council immediately appoint a task force to define new health regions for Nova Scotia, and report with its recommendations within two months of its appointment.

3.14 That the Government of Nova Scotia establish a Regional Health Authority for each of the regions defined by the task force of the Health Council, and appoint the boards of these Regional Health Authorities based on a public nomination process defined in consultation with the Provincial Health Council.

3.15 That the Ministry of Health immediately begin the administration of health programmes on the basis of theses new regions by transferring to the Regional Health Authorities financial resources for the management of all health care services.

3.16 That, upon establishment of the new regions, the Ministry of Health provide each Regional Health Authority with the resources to hire a Chief Executive Officer and staff, and initiate delegation of the responsibility for the planning and management of all health programmes to these Regional Health Authorities.

3.17 That the Regional Health Authorities immediately initiate local needs assessments as a basis for the development of Regional Services Plans.

3.18 That the Ministry of Health establish a Regional Team within the Ministry to facilitate and support the development of Regional Health Authorities during a transition period of up to a maximum of five years.

3.19 That the Ministry of Health realign and reorganize all departmental information bases, including physician utilization and payment information, to conform with the new regions.

3.20 That the Ministry of Health support the establishment of the management information systems needed by the Regional Health Authorities for regional planning, including workload measurement systems for nursing and the associate health professions.

5. INTERSECTORAL COORDINATION

With a view to maximizing efficiency and effectiveness of health service delivery, the Royal Commission examined the issue of interdepartmental coordination of health-related programmes and maintains that while strengthening coordination is a first step, consolidation of all health-related services within a single Ministry should be seriously considered. Short of integration, however, extensive regional networking and coordination will be necessary for the successful operation of a revitalized health system.

Coordination efforts among government departments with health-related policy interests are needed at the central level, and must be strengthened at the regional level. The Health Council will serve to unify the policy and planning of all sectors at the provincial level. At the same time, operational links between administrative units of government departments must be reinforced. Key departments with related policy interest — such as Health, Community Services, Education, Environment, Housing, and Labour — should be brought together under the aegis of Cabinet Secretariat to coordinate provincial policy and administration. Appropriate communication with the Health Council must also be established.

Joint strategies will be developed to deal with specific target populations with poor health status such as low income single mothers, the frail elderly, chronically ill children, or physically and mentally disabled adults. A combined and coordinated approach should more easily permit addressing of gaps frequently identified to the Royal Commission during its Public Hearings, such as chronic care.

A good example of partnership in the provision of care between the Departments of Health and Community Services has been the management of the Home Care programme. Staff from both departments are involved in the development and overall administration of the programme. This type of coordination is an initiative which the Royal Commission believes could be adopted in other areas where these two departments share major responsibilities, specifically in the area of long-term care.

Such a consultative framework for programme planning and policy development is essential. It is anticipated that resolution of professional, regional, or interdepartmental conflict, and of competition for scarce resources would thus be fostered. In time, integration may follow logically from improved coordination of these two departments.

The Royal Commission **RECOMMENDS:**

3.21 That the Government of Nova Scotia immediately establish, under the aegis of the Cabinet Secretariat, a committee to strengthen interdepartmental coordination on health-related issues at the senior Government level. This committee should consist of relevant ministers deputy ministers and supporting resources.

6. INTER-PROVINCIAL COORDINATION

Nova Scotia provides much of the tertiary care for the Maritimes. Planning for these services should not be conducted in isolation from the goals and objectives of the other provinces. A coordinated Maritime approach should produce a more precise determination of the range of services, as well as the numbers and types of professionals that are needed for the region as a whole.

Planning for the supply of physicians presents a special case for inter-provincial coordination. Even if enrolments at the Faculty of Medicine at Dalhousie University were reduced, physicians trained elsewhere could easily move into the province, thus confounding strategies designed to limit their numbers. National coordination is necessary to effectively deal with this issue.

Similarly, the assessment of medical technology represents a complex problem beyond the resources of Nova Scotia to fully address. National and international cooperation are essential in determining appropriate clinical utilization of demonstrably safe and effective technological devices, drugs, and procedures. Information must be gathered, disseminated, and applied locally, but the original research will typically be the result of broader cooperative efforts and international studies.

The Royal Commission **RECOMMENDS:**

3.22 That the Province of Nova Scotia act jointly with the Provinces of New Brunswick and Prince Edward Island to create a Maritime Provinces' Health Secretariat to coordinate policy and health initiatives for the Maritimes, with the Province of Newfoundland consulted as appropriate.

3.23 That the Province of Nova Scotia participate in and financially support the formation of a national agency which would coordinate and cooperatively pursue health technology evaluation and research.

7. HEALTH FACULTIES — DALHOUSIE UNIVERSITY

The roles of the Faculties of Medicine, Health Professions and Dentistry at Dalhousie need to be considered in a broad Maritime context. These Faculties are integral parts of both Dalhousie University and the health care systems of the Maritime provinces. As components of three — and sometimes four — provincial health care systems, they focus on providing specialized services, as well as addressing most of the human resources requirements in health for the Maritime provinces.

The Royal Commission does not wish to see these Faculties so tightly integrated into the health care system that their research and educational activities would be compromised. There is concern, however, that the health system may be driven by education and professional aspirations. For example, the Royal Commission believes that medical internships and residencies should be structured to reflect the needs of the Maritime provinces. Residency programmes in particular should be geared to the specialties and subspecialties which can be supported by the population of this region.

Because these Faculties are parts of two very different systems, it is often assumed that they can satisfy disparate and potentially competing expectations. For example, many of the specialties and subspecialties recognized by the Royal College of Physicians and Surgeons may not be viable programmes if regional health needs are the determining factor. These Faculties can also receive funds from a variety of sources over which the University has little influence or control — clinical practice plans, teaching hospitals, and three Departments of Health, for example.

Given these multiple sets of expectations and diverse sources of funding, the Royal Commission believes that the Maritime health care systems and Dalhousie University would benefit from the formation of a **Health Faculties Board** within the organizational framework of Dalhousie University, bringing together appropriate expertise from the Maritime provinces to continually review and assess the broad roles and complex responsibilities of the Faculties of Medicine, Health Professions and Dentistry at Dalhousie.

This Board should also oversee the financial administration and programme responsibilities of these Faculties on behalf of the Board of Governors of Dalhousie University and those Departments of Health that provide direct funding. Further references to the funding relationships between the government and the proposed Health Faculties Board are made in Chapter IV. The Royal Commission believes that any organizational mechanism must have unambiguous lines of authority, responsibility, and accountability to fully assure to its constituencies that the programmes and resources of these three Faculties are being used effectively and efficiently for the purposes intended.

The Royal Commission believes that, *inter alia*, this Board should consist of representatives of:

- Dalhousie University;
- the Departments of Health of the three Maritime provinces;
- the Departments of Education of the three Maritime provinces and/or the Maritime Provinces Higher Education Commission; and
- the Council of Teaching Hospitals.

In keeping with its own guiding principles of participation and accountability, the Royal Commission envisions specific terms of reference and precise membership of this Board being developed by a task force appointed by The Council of Maritime Premiers and the Governors of Dalhousie University, with the Province of Newfoundland consulted as appropriate.

The Royal Commission **RECOMMENDS**:

3.24 That the Province of Nova Scotia request Dalhousie University, in cooperation with the Council of Maritime Premiers, to appoint a task force with the mission to develop the precise representation and specific terms of reference for the establishment of a Health Faculties Board within the organizational framework of the University.

Implementation Schedule — Chapter III

		1990-91	1991-93	1993-96
3.01	▪ Adopt a broad definition of health based on the principles of a Comprehensive Health Policy.	→		
3.02	▪ Develop provincial health goals based on the principles of a Comprehensive Health Policy.	→		
3.03	▪ Provide or publicize information on health status and health surveys.	→	→	→
3.04	▪ Appoint a Provincial Health Council.	→		
3.06	▪ Initiate a participatory process to develop health goals for the province.	→	→	→
3.07	▪ Merge the Department of Health & Fitness, the Health Services & Insurance Commission and the Commission on Drug Dependency into a "Ministry of Health".	→		
3.08	▪ Transfer all policy, research and analysis functions carried out by Maritime Medical Care to the Ministry of Health.	→		
3.09	▪ Establish a Health Policy and Management Research Centre.	→		
3.10	▪ Improve and update Ministry of Health information systems.	→	→	
3.11	▪ Government to review compensation policies for senior and middle management.	→	→	
3.12	▪ Provide continuing education and professional training to Ministry of Health personnel.	→	→	→
3.13	▪ Appoint a Task Force to define new health regions.	→		
3.14	▪ Establish a Regional Health Authority for each region.	→	→	
3.15	▪ Transfer financial resources for management of health care programmes to R.H.A.s.	→	→	

		1990-91	1991-93	1993-96
3.16	▪ Provide each R.H.A. with the resources to hire personnel and delegate responsibility to administer programmes.	→	→	
3.17	▪ Each R.H.A. to initiate needs assessment as a basis for the Regional Health Services Plan.	→	→	
3.18	▪ Establish a Regional Team within the Ministry of Health to facilitate support development of R.H.A.s.	→	→	
3.19	▪ Reorganize all Ministry of Health information bases to conform to R.H.A. boundaries.	→	→	
3.20	▪ Support the establishment of M.I.S. systems needed by R.H.A.s for planning, including workload measurement systems.	→	→	
3.21	▪ Strengthen interdepartmental coordination on health issues by creating a committee of appropriate Ministers and Deputy Ministers.	→	→	→
3.22	▪ Create a Maritime Provinces Health Secretariat.	→		
3.23	▪ Participate in and support national health technology evaluation and research.	→	→	→
3.24	▪ Establish a health faculties board at Dalhousie University.	→		

CHAPTER IV
HEALTH PROFESSIONS

INTRODUCTION

The Royal Commission believes that the highest priority must be placed on the long-term implications of human resources planning, allocation, and management. Given its magnitude, the health care system has a momentum that is difficult to redirect. Key decisions taken immediately, however, will allow for a gradual change, enabling Nova Scotians to improve the quality of their health and health care system, while controlling expenditures. Failure to act now will weaken possibilities for change or improvement in the future.

Health human resources policy must be based on a planning process that takes into account present and future health needs, and is capable of adaptation to changing needs and alternative modes of service delivery. Ultimately, it must be flexible, to allow the mix of health professionals to be managed in a way which best and most efficiently meets the health requirements of the population.

The Royal Commission maintains that the full range of medical sub-specialties cannot be warranted by the health needs of the region's population. It has observed that past decisions have not always been adequately related to population-based needs. In keeping with the Guiding Principle of matching resources to health needs, it is essential that local and regional needs should drive human resources planning in the health sector rather than the aspirations of national professional organizations. There must be a greater awareness that **the Maritime provinces and Nova Scotia specifically cannot support the full range of sub-specialties recognised by the Royal College of Physicians and Surgeons.**

Currently, the mix of health professionals in Nova Scotia continues to be oriented towards the medical profession and hospital-based curative care, although the ratio of physicians to other health professionals has been declining, as in other jurisdictions. Given the constant evolution of the health system, the nature of health personnel requirements continues to change. Health care delivery is becoming more home and community-based, with less emphasis on inpatient hospital care. Accordingly, personnel mix must reflect this trend and provide for alternate means of offering services.

The full range of health services called for in this Report will require a new balance of professional and auxiliary resources. A **Provincial Health Human Resources** plan must address the role, numbers, and most appropriate mix of health professionals and disciplines that will effectively meet the health needs of Nova Scotians. A health human resources plan must view the **totality** of the health professions, and not address each group in isolation. The New Strategy for Health will involve a review of a variety of health service professionals and examination of new complementary relationships in a broader context.

There is a need to re-examine the scope of services delivered by given professional groups. A major impediment to effective utilization of health human resources is the perceived right of certain established professions to preserve the traditional scope of their activity, restricting the delegation of functions to others. The premise that only physicians can perform certain tasks must be reassessed. It is the Royal Commission's belief that many of the services currently performed exclusively by physicians, particularly those related to primary health care, can be performed quite competently by other health professionals. This is the assumption on which the development of innovative practice organizations such as Health Maintenance Organizations and Health Service Organizations is based. In these delivery settings, nurse practitioners routinely perform a wide variety of tasks traditionally performed by physicians.

Health disciplines legislation must be based on an unbiased assessment of skills to ensure the most effective use of professional skills and education is applied to meeting the health needs of the population. Practice requirements should be flexible enough to allow the appropriate substitution of less costly personnel for certain services, and allow for expansion of alternative modes of practice using different mixes of health professionals.

Central to many of these changes is the development of a health human resources strategy that places education of health professionals in the context of a new emphasis on health promotion. The inter-relationships and roles of the health professions must be examined and evaluated in light of this new orientation. Only then can the numbers, types, and distribution of physicians, nurses and other health professionals be effectively addressed.

All health professionals must develop more knowledge and effective skills to deal with health problems related to chronic conditions and old age, which constitute 50 to 60 per cent of the health care needs of developed societies. This requires a change in the fundamental approach of health professionals, as well as re-orientation in clinical training. Educational curricula must emphasize training programmes in community health and gerontology, in order to produce health professionals who can provide quality services working in either institutional or community settings. To prepare health professionals for these new complementary relationships, educational curricula and shared clinical placements should familiarize the professions with each other's service role.

The Royal Commission therefore **RECOMMENDS:**

4.01 That the Ministry of Health in consultation with the Health Council develop a comprehensive health human resources plan based on health needs of the population and a review of the present and future roles of all health professsionals to determine appropriate entry points to the health system, numbers, mix, training, scope of practice and distribution of health professionals in Nova Scotia.

4.02 That new modes of delivery for the services of all health professionals be explored, including expansion of the roles of the professions and entry points to the health system, non-institutionally based delivery of care, and shared service models to achieve a cost-effective mix of health personnel. That appropriate legislation be enacted to allow flexibility in the delivery of specific health services by all the various health professions.

1. NURSES

Nursing is the largest health profession in the province. Research conducted on behalf of the Royal Commission early in 1989 determined that the major issues within nursing relate to quality of worklife, education and professional development, and the changing role of nursing in an evolving health care system.

Supply and Demand

While annual growth in the number of registered nurses has been consistent over the past decade, a general increase in nursing vacancies in specialty areas and in the more remote regions of several parts of Canada has become a growing concern. Some of these nursing shortages may be attributable to changing demography, increased patient acuity, decreases in the use of support staff, non-traditional nursing employment, and a trend toward part-time and casual employment. However, much of the shortage is the result of voluntary withdrawal from the workforce. Nova Scotia has recently experienced some shortage of nurses in certain parts of the province and in some specialties. These trends, in conjunction with the lack of hospital and province-wide nursing resources planning, are causes for concern. **Coordinated planning is essential in order to ensure the continued availability of an adequate supply of nurses in Nova Scotia.**

The number of registered nurses from 1979 to 1987 increased 25 per cent[1], which exceeded the population growth and kept pace with increases in the 65 and over age group. (Table 4.1) Equally important is the percentage increase of nurses who are currently employed in their profession.

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[1] Federal-Provincial Advisory Committee on Health Human Resources, **Report on Nursing Human Resources**. Submitted to the Deputy Ministers of Health, Dec. 7 & 8, 1988, Ottawa. [Unpublished].

Table 4.1

Nursing Supply in Canada 1979 and 1987

	Total Number 1979	Total Number 1987	Percentage Over Period	Change Annual
Registered Nurses Total	192,747	241,759	25.4	2.9
Employed:				
Registered Nurses	148,827	210,773	41.6	4.4
Certified Nursing Assts.	77,523	83,543	7.8	0.9
Canadian Population:				
65+	2,201,200	2,792,700	26.3	3.0
Total	23,911,900	25,795,800	7.9	1.0

Nova Scotia has the highest practicing nurse to population ratio of all the provinces and has, since 1966, increased 55 per cent compared to the national average of 33 per cent[2]. (Table 4.2)

Table 4.2

Population per Registered Nurse

					Percentage Increase		
	1966	**1975**	**1976**	**1986**	**1966-75**	**1976-86**	**1966-86**
Nova Scotia	240	143	147	108	40%	27%	55%
Canada	187	130	168	125	30%	26%	33%

National employment trends of nurses during the period 1979 to 1987 reflect a strong increase in the proportion of positions held in nursing homes and in community health services[3]. (Table 4.3) Although hospital employment increased proportionately less than the former two sectors, it accounts for 74.5 per cent of employment in nursing in 1987[4].

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[2] Health and Welfare Canada, **Health Personnel in Canada** (various years).

[3] Federal-Provincial Advisory Committee on Human Health Resources. **Report on Nursing Human Resources**.

[4] Ibid.

Table 4.3

Changes in the Number of
Registered Nurses Employed in Nursing, by Sector of Employment, Canada
1979 and 1987

Employment Sector	1979	1987	Percentage Increase 1979/1987
Hospital	109,893	154,194	40.3
Nursing Home	8,529	14,498	70.0
Community Health	13,442	20,295	51.0
Physician's Office	4,094	5,478	33.8
Educational Institution	4,628	5,540	19.7
Other	4,807	8,002	66.4

The increased demand for registered nurses across Canada within public hospitals was almost twice as high as for all other hospital personnel and four times higher than for certified nursing assistants. Data by employment sector suggests that nursing assistants are being displaced within the acute care setting and are shifting towards long-term care units and facilities. In Nova Scotia, this displacement is occurring particularly in the Halifax Metro area where there appears to be an "unofficial" policy of replacing nursing assistants with registered nurses as vacancies appear, along with the phase-out of porter and orderly support. Within Nova Scotia, the ratio of hospital-based, registered nurses to certified nursing assistants has shifted from approximately 2.6:1 to 3.5:1 since 1976[5].

The proportion of part-time employed nurses has increased from 20 per cent in 1971 to 42 per cent in 1986. This is higher than all other health professions, which average 33 per cent, and the labour force as a whole with 21 per cent part-time employment. Nursing homes and physician offices report the highest level of part-time employment at 50 to 60 per cent. Slightly more than one-third of nurses in hospitals are employed on a part-time basis. Casual and temporary employment are also growing in importance, and the Royal Commission heard concerns about this issue. Although no national figures are available, casual staff in Nova Scotia have increased 58 per cent since 1980 compared to an 11 per cent increase among permanent, full and part-time nurses. Nurses working less than full-time vary from 61 per cent in Quebec to 12 per cent in Manitoba with other provinces averaging between 36 to 46 per cent[6].

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5. Correspondence from the Department of Health and Fitness to the Nova Scotia Certified Nursing Assistant Association (1988).
6. Federal-Provincial Advisory Committee on Health Human Resources. **Report on Nursing Human Resources.**

Increasing levels of part-time and casual workers may be attributable to three main factors:

- Women are continuing to work during the childbearing years and are **choosing** part-time employment as a way of managing family and professional commitments.

- Nurses discontented with inflexible management policies see casual work as a **means of gaining more control** of their own schedule.

- Current organizational and hiring patterns look to casual and part-time nurses as a way to **save on benefits** negotiated through collective agreements and to allow for more flexible scheduling.

Although nurses compose the largest and fastest growing occupational group, far exceeding the growth of the general population, many factors have created a demand for services which has led to increasing vacancy rates. Some of the more significant factors include technological advances, increased acuity of patient care, service intensity, shifts in demography such as the increased percentage of elderly, changing patterns in health care delivery, differences in management's use of professional staff, and staffing preference for registered nurses over less skilled workers[7].

Shortages traditionally affect remote geographic areas, specialty areas, and the staffing of less desirable shifts at night and on weekends, and the summer months. The Federal-Provincial Advisory Committee on Health Human Resources[8] states that workforce imbalances resulting in nursing shortages appear to be recurrent, with the last documented imbalance taking place in 1979-1980. Signs of the current imbalance first appeared in 1986. The Royal Commission endorses the continued participation of Nova Scotia on the Federal-Provincial Advisory Committee on Health Human Resources in the monitoring of national and provincial nursing employment statistics in order to keep apprised of labour force trends for nurses.

In January 1989, the Registered Nurses Association of Nova Scotia surveyed 128 hospitals, rehabilitation centres, and homes for special care regarding planning in their facility for the supply and development of nurses. Only a small number stated they had long-range plans for supplying and replacing nurses. Although planning for new programmes has a direct impact on nursing requirements, few of the institutions surveyed plan for more than a year in advance. A need for planning is also evident at the provincial level in the Department of Health and Fitness. Comprehensive, consistent and coordinated data collection and analysis are essential to ensure an adequate supply of nurses with appropriate skills to meet the future health care needs of Nova Scotians.

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7. Employment and Immigration Canada Occupational Studies and Program Linkage Unit. **An Analysis of the Demand for and Supply of Nursing Personnel in Canada**. (Ottawa: 1988).
8. Federal-Provincial Advisory Committee on Health Human Resources. **Report on Nursing Human Resources**.

The Royal Commission therefore RECOMMENDS:

4.03 That the Ministry of Health place the utmost priority on the planning of nursing human resources. Further, that the coordination of nursing human resources planning be ensured through the development of a comprehensive information base at the provincial and institutional levels.

4.04 That the Provincial Health Council evaluate the role of the Certified Nursing Assistant.

Worklife Issues

The Royal Commission believes that the nursing profession must be viewed in the context of broader social changes affecting women. As societal values evolve and women gain equal opportunities for career choices, the traditional "handmaiden" role of nursing is losing acceptability for women practicing or contemplating a career in nursing. The current state of dissatisfaction in the nursing workforce, increased non-traditional employment of nurses, more career opportunities for women, and changing societal views may be the real determining factors. As women remain in the workforce, by their own choice or due to economic necessity, their expectations and needs have changed, with job satisfaction becoming one of the key concerns. The Royal Commission believes that the current nursing shortage is not a temporary situation but may be an indication of a much broader trend, which could, if not addressed, lead to a crisis.

The role of nursing itself is changing also and now includes a recognized independent role, in addition to the traditional one which is dependent on delegation by the physician. Nurses, therefore, have a greater professional, ethical and legal responsibility for which they expect commensurate recognition and the opportunity to work as equal partners with other health professionals. The development of nursing specialties has also contributed to the expectations of greater recognition from other health professionals. However, other health professionals and health care organizational structures have not been able to respond to changes within the nursing profession in a timely fashion.

Many of the concerns voiced by nurses are symptomatic of the lack of influence they have on decisions that affect their daily activities. The quality of communication within the inflexible, bureaucratic, and vertical organizational structures in which nurses practice, points to the need for different approaches to organizational and human resources management. In accordance with the Guiding Principles presented in this Report, the Royal Commission believes that the empowerment of nurses through increased participation and decentralization of decision-making is fundamental to effective retention and future recruitment of nurses.

Management of workload, a central issue to nurses, is extremely difficult due to the lack of flexibility in the system. This problem begins at the government level. In Nova Scotia, the Department of Health and Fitness uses standard guidelines for staffing facilities which are based on historical data and projected patient utilization. These guidelines do not take into account the actual amount of sick and vacation leave time alloted to nurses through the collective bargaining process. Provision is not made for educational leave, including inservice, continuing education, conferences or in-hospital orientation. Deviations from approved staffing levels, compounded by non-funded leaves, vacations, and sick leave, commonly lead to the closure of hospital beds during the summer and problems with understaffing, and cause the Royal Commission concern with respect to the ability of institutions to meet acceptable standards of patient care.

More demands are put on nursing staff when the hospitals, which usually have not received the full funding amount requested in their budgets, routinely ask nursing departments, which make up a large part of the budget, to cut their costs. This exacerbates staffing pressures at the unit level. There should be increased accountability for facility-based budget cuts in nursing department budgets. Furthermore, cuts in departmental budgets, such as dietary services, laboratory services, or housekeeping, should be evaluated with respect to their impact on nursing services.

Shortages of support staff, such as certified nursing assistants, porters, orderlies and clerks, resulting in the performance of non-nursing duties by nurses, contributes to difficulties in management of nursing workload. The lack of support staff is considered to be a major factor with respect to job-related injuries. The most common one experienced by nurses is back injury.

The Nova Scotia Department of Health and Fitness is conducting a pilot project to implement a workload measurement system in 21 hospitals. The goal of this system is to match individual patient care needs with the appropriate nursing hours required. Nova Scotia is the only province to undertake such a coordinated project and, therefore, should be commended for its commitment to assisting hospitals and managers to work towards more effective use of nurses.

Although a workload measurement system provides the potential for efficient use of resources, it may not realistically consider the demands made upon nurses. It might not, for example, allow appropriate time for nursing functions such as teaching and counselling that are essential to quality patient care. Emergency and non-nursing duties also contribute to unaccounted work time. It is important that workload measurement systems be designed to directly interface with hospital-wide information systems as envisaged through the provincial management information systems project.

A key factor to the success of any workload measurement system is the capacity of staffing to the appropriate levels which have been identified through systems evaluation. The lack of reconciled Department of Health staffing guidelines with collective bargaining agreements hinders the ability of workload measurement systems to function effectively. An additional factor contributing to the disruption in management of nursing workload is the lack of management training programmes available to enhance the management skills of nurses. Given these factors, accurate workload measurement can actually increase individual frustration with working conditions as the scarcity of resources is emphasized by the workload measurement system itself. **Nursing workload measurement systems must be developed as a**

component of a broader province-wide management information system which is tied to the budgetary process and enables an appropriate level of funding for nursing departments.

Nurses want and expect greater control over their work schedule. Most hospitals have rigid guidelines requiring mandatory shift rotation from days to nights, and weekdays to weekends and holidays, with little consideration given to the difficulties this presents for family life and personal health. Alternatives to this rigid scheduling are rejected by the majority of hospitals on the basis of cost, efficiency, and continuity of patient care. The effects of shift work over long periods of time are a contributing factor to the "burn-out" that nurses cite as a major factor for leaving the nursing profession. Demands for control of their own schedule, flexible hours, permanent shifts, self-scheduling, and job-sharing are increasing. As in many other sectors of the economy, health care employers must recognize and support the personal and family commitments of their employees if they wish to reduce absenteeism and turnover.

Low salaries are also cited as a key issue contributing to discontent in the nursing profession. This is a difficult issue to resolve due to fundamental differences of view. Recent events have overtaken salary information collected during this study. The Royal Commission is encouraged by recent developments which begin to address the fragmentation of the collective bargaining process. However, **the Royal Commission wishes to stress its view that fundamental changes, and not merely additional money, are required to effectively address the root causes of discontent in nursing.**

While nurses believe they are underpaid, this view is not widely shared by health care administrators. The Nova Scotia maximum annual staff nurse rate of pay increased 218 per cent between 1978 and 1987, from $14,397 in 1978 to $31,331 in 1988. Although this rate of increase is comparable to other provinces, Nova Scotia has the lowest maximum salary for staff and head nurses in Canada and the fourth lowest minimum staff salary, after Quebec, Newfoundland and New Brunswick respectively[9]. (Table 4.4) Nova Scotia is the third lowest in minimum head nurse salaries, excluding Quebec. Nova Scotia has the second lowest salary range for staff nurses and the lowest for head nurses. The difference between the maximum salary of a staff and head nurse is $2,185. The salary range, between minimum and maximum, for a staff nurse is $5,145. If a nurse is one of the 8 per cent who become a head nurse, the entire salary range, between minimum and maximum, is only $7,040.

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[9] British Columbia Nurses Union, **Salary and Wage Data. Major Hospital Agreements, March 1989.** (Vancouver: 1989)

Table 4.4

Annualized Salaries
Major Hospital Agreements
Canada, March 1989

Province	Annualized Salary				Number of Steps	
	Staff Nurse		Head Nurse		Staff Nurse	Head Nurse
	Min.	Max.	Min.	Max.		
Nova Scotia	26,476	31,331	28,661	33,516	6	6
New Brunswick	25,859	33,003	27,992	35,744	6	6
Newfoundland	25,593	32,305	27,800	35,241	7	7
Prince Edward Island	27,475	34,205	30,160	37,510	6	6
Québec	24,241	33,006	N/A	N/A	12	N/A
Ontario	32,786	40,203	N/A	N/A	10	N/A
Manitoba	27,118	34,868	31,487	39,927	7.5	7.5
Saskatchewan	29,271	38,060	33,500	42,679	8	8
Alberta	31,171	37,097	33,982	41,527	7	7
British Columbia	29,508	34,128	34,608	40,008	6	6

The maximum salary range for general staff nurses in Nova Scotia is reached within 6 years, and possibilities for career advancement thereafter are quite limited. Remuneration for educational training is inadequate with an additional $600 per year for a baccalaureate degree. There is no additional pay for clinical expertise, and nurses receive inadequate compensation for shift differentials. Although salaries, in general, are lower for many occupations in the Maritime provinces, the structure of compensation and professional development within nursing needs to be addressed.

The Royal Commission believes that the key question to be addressed with respect to the role of the nurse in health care is, what value do we place on nursing care, and, therefore, nursing as a profession?

The Royal Commission therefore **RECOMMENDS:**

4.05 That the Provincial Health Council oversee the development and implementation of the following measures with respect to nurses:

(a) Job enhancement initiatives to be funded by the Ministry of Health.

(b) Organizational structures providing unit managers with the authority to allocate human and financial resources, and that encourage participatory management on a unit and facility-wide level.

(c) Options allowing for greater flexibility and individual control over scheduling, such as "flex" time, job sharing, leaves of absences, extended parental and education leaves, deferred salary leaves.

(d) Guidelines for a clinical ladder structure as the basis for a salary grid that provides financial compensation consistent with clinical expertise, levels of responsibility, and variations in work conditions.

(e) Impact analysis of all new programmes and services to assess increased demands on nursing services and the commensurate financial implications.

4.06 That the Provincial Health Council initiate a demonstration project in a health institution based upon the principles of participatory management and a collaborative team approach to the delivery of patient care. Participants in this project should include representatives from the unions representing nurses, employers, university nursing programmes, the Registered Nurses Association of Nova Scotia, staff physicians and staff nurses, who will be responsible for the design and implementation plan. This demonstration project, which should operate approximately 18 months, should be evaluated every six months.

Education and Professional Development

The minimum educational requirement for entry into practice is a contentious issue within the nursing profession. In Nova Scotia, four-year baccalaureate programmes in nursing are offered by Dalhousie University in Halifax and St. Francis Xavier University in Antigonish, with a combined enrolment of about 95 students each year. The University College of Cape Breton in Sydney has received approval to begin a programme, but it is not yet in operation. Schools of nursing offering twenty-two month diploma programmes are operated by the Western Regional Hospital in Yarmouth, St. Martha's Hospital in Antigonish, Aberdeen Hospital in New Glasgow, Sydney City Hospital and the Sydney Community Health Centre in Sydney, and the Halifax Infirmary Hospital and the Victoria General Hospital in Halifax. These schools accept a total of about 370 students yearly. After graduation from either of these educational routes, a set of exams administered by the Registered Nurses Association of Nova Scotia must be passed in order to become a Registered Nurse and be licensed to practice nursing in the province.

In 1984, the Registered Nurses Association of Nova Scotia adopted the position of the Canadian Nurses Association that a baccalaureate degree become the minimum educational requirement for entry into the nursing profession by the year 2000. The rationale for this change is based upon an assessment of changing health needs of society and of modes of delivery which affect nursing practice. The Canadian Nurses Association argues that the knowledge explosion, changing illness patterns, evolving concepts of health care delivery and policy, and the need for greater focus on prevention and health promotion within home and community-based care settings, require a broader-based education than that offered by the diploma programmes.

Nursing is currently the only major health profession that does not presently require a baccalaureate degree for entry to practice. As 84 per cent of registered nurses in Nova Scotia are diploma trained, a change to the entry to practice requirement will entail major changes in nursing education. There are also serious implications for the supply of nurses, given the relative sizes of the baccalaureate and diploma programmes in Nova Scotia.

This call for higher requirements for entry to practice has met with opposition from hospital organizations, unions and provincial governments. Although the position of the Canadian Nurses Association has a "grandfather" clause which protects all nurses registered by the year 2000, the unions feel that the diploma graduates will become the second-class citizens of the system. The key concerns raised by opponents to the position are the effects on recruitment, patient care, and the economic consequences for potential nursing students, employers, and universities.

The Royal Commission has examined the broad implications for change in the delivery of health care and maintains that the role of nursing must be re-defined within that conceptual framework. The future health care system will require nurses possessing skills in assessment and counselling, and the ability to work independently. It is essential that nurses be educated for their role as primary health care givers. If the role of nursing and worklife issues remain substantially as they are today and nurses are required to obtain a baccalaureate degree for entry to practice, the outcome would likely be a substantial decrease in the number of individuals choosing nursing as a profession. There is already attrition of nurses with degrees who find significant discrepancies between the educational values they have learned and the conditions they actually encounter in the workplace. On the other hand, it is very likely that if some of the critical worklife issues in nursing are not addressed, the profession may suffer the same fate regardless of entry requirements.

Representatives from professional and labour organizations, management, educational programmes, and licensing bodies of the nursing and related professions must cooperate to address the professional, worklife, and managerial issues confronting the nursing profession. There are strong and conflicting views on many of these issues, but practical solutions for their resolution must be developed. It is not the mandate of the Royal Commission to act as a mediator to build consensus between competing interests. However, **the Strategy for Health and the Guiding Principles developed in this Report have far-reaching implications for the nursing profession. These must form the conceptual framework for the resolution of these pressing questions.**

Lack of formal recognized routes for advancement is a fundamental deterrent to the professional development of nurses. The clinical, educational, administrative, and research fields of nursing need to be defined and mechanisms created for recognition and commensurate status and pay.

The Victoria General Hospital is conducting a Clinical Promotion Project, funded by the National Health and Research Development Programme, which identifies distinct levels of demonstrated competence, and is designed to define career goals as well as provide criteria to match nursing skills with patient needs. While these efforts are commendable and have contributed to the professional development of nurses, they are still only a partial solution. The issue of salary commensurate with professional standing remains to be addressed. This project should be followed closely and its implications applied to the resolution of relevant issues.

Limited accessibility and lack of funding for continuing education disadvantages the nursing profession as well as the employers of nurses. While hospitals are given no incentives for developing their nursing resources, the lack of inservice training within facilities contributes to the number of inadequately trained managers. The inadequate salary differential for specialties offers little financial incentive for nurses to pursue these programmes. Lack of organizational support and the current structure of the nursing profession create additional barriers to professional development.

A major obstacle to continuing education in Nova Scotia has been geography. Funding for distance learning is limited and cannot meet the current demand. Although Dalhousie University offers a Master's degree in Nursing, enrolment is limited and is just beginning to address the need for graduate studies in nursing administration.

The Royal Commission believes that a fundamental change in the approach towards professional development of nurses must occur. They must be provided with opportunities for expanding their skills. Distance and continuing education should be funded, easily accessible, and tangible support made available through replacement budgets, tuition reimbursements, and flexible scheduling.

The Royal Commission therefore **RECOMMENDS:**

4.07 That the Provincial Health Council make recommendations on the following areas within a six month time frame:

- **(a) Implications of entry requirements to practice for nurses.**
- **(b) Definition of career and remuneration structures within nursing that recognize and compensate for expertise in administration, teaching, research, and clinical practice.**
- **(c) Accessibility to, and financial support for, continuing education through distance learning, university, and institutional programmes.**

4.08 That the Ministry of Health budgetary guidelines for hospital staffing be updated to provide funding for inservice programmes, orientation, vacations, educational leaves, and staff replacement time; that hospital funds be designated for continuing education; and that specific programmes be developed to strengthen management skills of nurses.

The Role of Nursing in Primary Health Care

Nurse practitioner, primary care nurse, and family nurse practitioner are terms used to describe nurses who have been appropriately trained to have initial contact with patients without physician supervision. Research studies in Canada and the United States estimate that between 40 and 90 per cent of primary physician visits could safely be delegated to nurse practitioners.[10] Estimated savings, had there been such a delegation, were approximated to be 10 to 15 per cent of total expenditures on physician services.[11] The Canadian amount estimated was $300 to $450 million in 1980, the year of study, and was projected by 1985 to be between one-half and three quarters of a billion dollars. This represents replacement potential for between 20 per cent to 32 per cent of general practitioners based on conservative estimates in 1985.[12]

Historically, interest in expanding the role of nurses in the delivery of primary health care was the result of the lack of physician interest in practicing in the remote regions of northern Canada. In 1972, a National Health and Welfare study supported this expansion, which subsequently led to the establishment of a number of nurse practitioner training programmes. Although the efficiency and value of nurse practitioners was evident, policies for integration were non-existent and training programmes were gradually phased out. Dalhousie University still offers a programme in Outpost and Community Health Nursing to refine clinical skills for nurses employed by the federal government and the Northwest Territories to practice in isolated communities.

In their capacity as providers of primary health care, nurses could serve an important role in community health service, not so much by replacing medical care but by encouraging self-reliance in the community, through both formal and informal health and social support programmes. They could also screen and route individuals, which might help lower the inappropriate use of other health professionals. In this role, nurses could be the first point of contact with the public, helping to address the general health problems of the community by guiding and assisting local efforts to promote health and prevent illness. This is especially true for sparsely populated rural areas. **Better use of nurses, the largest group of health professionals, has great potential for improving access to care, the quality of care, and the cost-effective use of the health care system.**

This shift from primary medical to primary health care will involve more community participation, individual empowerment, and collaboration between nurses, physicians, and other health professionals. The expansion of the nurse's role in the delivery of primary health care can be realized through interdisciplinary collaboration. A movement towards the delivery of cooperative primary health care

[10] J. Lomas and G. Stoddart, **Estimates of the Potential Impact of Nurse Practitioners on Future Requirements for General Practitioners**. (Hamilton: McMaster University, 1982)

[11] F.T. Denton, B.G. Gafini, B. Spencer, and G. Stoddart, "Potential Savings from the Adoption of Nurse Practitioner Technology in the Canadian Health Care System", **Socio-Economic Planning Services**, volume 17 (1983): 199-209.

[12] J. Lomas and G. Stoddart, "Estimates of Potential Impact on Nurse Practitioners and Future Requirements for Physicians in Office-Based General Practice", **Canadian Journal of Public Health**, volume 72 number 2, (1983): 119-123.

challenges health professionals to break through the barriers that create existing professional isolation. Members of the nursing profession must work with policy planners, government, and other health care professionals to make the necessary changes in health care delivery. This implies a need for change on the part of both government officials and representatives of nursing.

In light of changing modes of delivery of health services, the role of nursing and nursing education must evolve simultaneously, if nurses are to meet the needs of the communities they serve. The Royal Commission supports the view that new and more cost-effective modes of care can be developed and that nursing education programmes should be structured to best satisfy the requirements of a changing society.

The Royal Commission is cognizant of the complexity and scope of the challenges surrounding professional education and role, worklife conditions, and managerial functions of nurses. It accepts the proposition that these concerns will not be fully addressed by remuneration adjustment alone, but require fundamental structural changes. The Royal Commission believes that those involved must immediately address these issues.

The Royal Commission therefore **RECOMMENDS:**

4.09 That the policy and administrative framework for an expanded role for nursing in the delivery of primary health care in Nova Scotia be established. That this process involve collaboration of nurses and other health professionals, administrators, government and educational institutions.

4.10 That the Provincial Health Council develop an interdisciplinary demonstration project which expands the role of nurses to provide primary health care in a community setting, with delivery of services based on a team approach; that an 18-month time frame be set, with ongoing evaluation.

2. PHYSICIANS

The pivotal role of the physician in the health system cannot be overstated. As primary gatekeeper to insured health care services, the physician to a large degree determines use of other components of health services: hospital care, diagnostic testing, the introduction and use of technologies, specialist referrals, consultations, and prescription drug use.[13] **A strategy to manage the administration of physicians' services must clearly involve a multi-faceted approach, consisting of policies on physician supply, distribution — both professional and geographic — and utilization.** The Royal Commission strongly believes that to assure equity of access and improve quality of care to Nova Scotians, all three aspects of physician management **must** be concurrently addressed by government. Effective implementation involves an integration of measures dealing with the aforementioned areas. It is in this light that the Royal Commission is proposing a series of interdependent recommendations to enable government to effectively manage physicians' services while at the same time containing costs.

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[13] It has been estimated that each physician generates up to $400,000 in hospital-based health care costs. Morris L. Barer and Robert G. Evans, **Statement of Evidence to the Supreme Court of British Columbia**, March 27, 1986 [Unpublished].

In view of the critical role played by physicians, the Royal Commission undertook, in conjunction with the Department of Health and Fitness, a comprehensive physician human resource management strategy study which analyzed current trends in Nova Scotia, and proposed policy options to guide efficient management of physicians' services.[14] This section draws on the findings and policy proposals contained in that study.

A major contributor to rising Medical Services Insurance expenditures in Nova Scotia has been the **increase in physician supply**, resulting in a corresponding increase in the total number of physicians' services. Current thinking in health care economics maintains that growth in physician numbers is a greater determinant of increased utilization than population growth and the ageing of Canada's population.

As reviewed in Chapter II, **the rate of growth in the supply of physicians throughout Canada has, for three decades, consistently outstripped the rate of growth of the population as a whole**. Further, the growth in per capita utilization rates for physicians' services in Canada remains high. Increases in Medical Service Insurance expenditures for physicians, which have remained consistently higher than the rate of inflation, show no signs of abating. The situation is further exacerbated by the fact that, despite this high growth, pockets of undersupply, in both the geographic and professional sense, still persist in Nova Scotia.

The prospect of seemingly unlimited growth over the long run in physician expenditures is particularly alarming in the face of limited fiscal resources. **As such, it must become a high priority for government to rationalize the rate of growth of physician supply, while assuring equity of access, efficiency of expenditure, and the continued provision of high quality health care to the population of Nova Scotia.**

Other complicating factors, such as the introduction of new medical technologies, the increasing numbers of sub-specialties, and changing demographic and morbidity patterns, have made health human resources planning even more complex, and underline the necessity of making physicians' services more responsive to actual needs. The Royal Commission has observed that the current mix and distribution of physicians' services do not effectively correspond to the health needs of the population.

Planning for the number and deployment of physicians in Nova Scotia should form an integral part of the overall health care planning process, and be linked to regional population-based medical care needs. This process must analyze health status indicators, and then devise the most beneficial and cost-effective use of physicians in light of those needs. It must also ensure that there are enough physicians suitably distributed throughout the province so that all residents have equal access to appropriate levels of medical care. This planning process must be developed in close consultation with all the major participants, such as licensing bodies, educational institutions, government, and health care professionals and institutions.

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[14] Nova Scotia Working Party on Physician Manpower Planning, **Physicians in Nova Scotia: a Human Resource Management Strategy: Preliminary Report to the Nova Scotia Royal Commission on Health Care**, November, 1989. This study is published in Volume II of the Research Studies of the Royal Commission Report.

The primary objective of a physician human resources strategy, in the Royal Commission's view, is to promote the health and well-being of Nova Scotians through the provision of publicly-financed medical care services. At the same time, the province must ensure that those services delivered to the population are the most appropriate in terms of both clinical and cost-effectiveness. Equitable access to required medical care must be given high priority, so that persons with similar needs have equal access to appropriate levels of medical care in all regions of the province. The government must thus achieve an adequate supply and equitable geographic distribution of physicians' services **commensurate with the health services needs of Nova Scotians.**

While Chapter II has detailed a description of the supply, mix, cost, and geographic distribution of physicians' services, it is important to highlight some of these findings:

Physician Supply

- Concerns with respect to over-supply of physicians in Canada have been expressed for over a decade. Despite recommendations to curtail medical school enrolments and immigration, the increase in the number of physicians continues to exceed population growth by a factor of four to one.
- Nova Scotia's rate of growth in the numbers of physicians has been higher than the Canadian rate of growth during the past decade. In terms of active physician to population ratio, for 1987-88, Nova Scotia ranked highest in Canada.[15] In 1987, Nova Scotia had a physician to population ratio of 1:461, which surpassed the national target of 1:550 identified by the Federal- Provincial Advisory Committee on Health Human Resources for the year 2000.
- The number of physicians in Canada and Nova Scotia is expected to continue to increase 2.2 per cent to 2.5 per cent annually, compounded, from 1987 to 2006. The physician to population ratio is projected to be 1:350. The annual rate of growth of Nova Scotia's population for the same period is projected to be only 0.4 per cent.
- Despite an identified surplus in the Halifax area as early as a decade ago, over half of all general practitioners trained at Dalhousie University's Faculty of Medicine have established practices within Halifax County, contributing to ongoing maldistribution of physicians' services in Nova Scotia.

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[15] Health and Welfare Canada, **Full-Time Equivalent Physicians — Interprovincial Comparisons — Methodology and Statistics from 1983/84 to 1987/88.** (Ottawa: 1987).

To be effective, a comprehensive physician human resources strategy must encompass a number of major policy measures that affect the supply, production, use, and demand for physicians. These issues include legislative reviews and a reassessment of alternate modes of health care delivery. Legislation for all health professions should be considered to provide for maximum flexibility in the use and mix of health service personnel in delivering quality health care services.

The extent of inter-provincial migration of professionals demonstrates the need for a coordinated national approach to human resources planning. A primary determinant of the rate of growth of physicians in Nova Scotia is the **rate of growth of physicians in Canada**. The province must, therefore, give utmost priority to the achievement of a federal-provincial agreement for a substantial reduction in the rate of growth of physician human resources in Canada, which is currently more than four times the rate of growth of the population.

The role, size, and orientation of the Dalhousie University Faculty of Medicine must also be examined with respect to servicing the needs of both Nova Scotia and the Maritime region. The total number of undergraduate, intern, and resident training positions funded in Nova Scotia and in Canada must be determined by long-term human resources requirements. It is therefore important that funding for undergraduate medical education move away from a per capita formula, and be allocated in such a manner as to provide a stable administrative base for the Faculty of Medicine to train the required number of medical students.

As we have seen, the rate of increase of public expenditures on physicians' services has been closely related to the growth in physician supply.

To ensure that this supply will be determined by the health needs of Nova Scotians, the Royal Commission therefore **RECOMMENDS:**

4.11 That, in view of the projections of increased physician human resources and their implications on Medical Services Insurance expenditures, the Ministry of Health place the utmost priority on physician human resources planning strategies, working in consultation with key groups.

4.12 That the Ministry of Health, in keeping with the recommendations of the physician human resource management strategy, establish targets for physician numbers, in total and by specialty, commensurate with the Provincial Health Strategy. That the necessary measures required to achieve these targets, including reductions in enrolment and immigration, be immediately implemented.

4.13 That the Ministry of Health determine regional requirements for physicians, including appropriate mix of specialties, in keeping with the principle of regionally-based planning. This regional planning will be based on demography and health status indicators, within provincially-established guidelines.

4.14 That, given the national market for physicians, and the large annual interprovincial flows of physicians, the Ministry of Health continue to work towards a federal-provincial agreement to bring about a general reduction in the rate of growth of numbers of physicians in Canada.

4.15 That the Government of Nova Scotia work towards a reduction in total undergraduate medical school enrolment in Canada of 25 per cent. Further, that the Dalhousie Faculty of Medicine share the national burden of reduction on a proportional basis, taking into consideration its recent enrolment reductions. That alternate funding mechanisms for the Dalhousie University Faculty of Medicine, other than the per capita formula, be developed.

Institutional Supply of Physicians

In the institutional setting, physician "requirement" information should be reviewed in conjunction with utilization rates for the physician's specialty, the hospital's workload, and the region's utilization pattern. This can be achieved by joint regional and hospital-specific human resources planning. Institutions should also take an active part in human resources planning at the regional level. Whenever new clinical appointments are considered, hospitals and Regional Health Authorities must take into account the full range of associated health benefits and institutional costs, through physician-impact analyses and programme evaluations.

Negotiations between Regional Health Authorities and hospitals for the allocation of physicians should aim to achieve an efficient use of human resources. These negotiations should consider the short and long-term consequences of continued growth in physicians per capita and continued increase of the specialist to general practitioner ratio. Thus, no new physician should be granted a position or hospital privileges without an institution and the Regional Health Authority first conducting an impact analysis and receiving official approval from the Ministry of Health.

It is anticipated that the Regional Health Authorities will play the primary role in determining physician human resources requirements for institutions within their regions based on the Regional Services Plan. All hospitals in a region will, in conjunction with the Regional Health Authority, together prepare a hospital role study for the region, which will include assessments of medical staffing requirements. These regional role studies will be reviewed by the Ministry of Health for consistency with the Provincial Health Goals and the Provincial Health Strategy.

The Royal Commission therefore **RECOMMENDS:**

4.16 That the medical staffs of community, regional, and tertiary care hospitals be established at a level appropriate to the service roles established in the Regional Services Plans.

4.17 That any growth in an institution's medical staff be based on Regional Services Plans and regional human resources planning, be subject to impact analysis, and receive both Regional Health Authority and Ministry of Health approval.

Restriction of Billing Numbers

It is anticipated that the measures discussed in this section will adjust the long-term supply in the numbers of physicians practicing medicine in Nova Scotia. Supplemental measures, however, will be required to achieve effective management of physicians' services, both in terms of geographic and specialty distribution. While impact analysis will control the growth of institutionally-based physicians, it will also be necessary to manage the numbers of non-institutionally-based physicians. Furthermore, in view of the direct and indirect cost of each additional physician to the system, measures for the control of medical human resources in Nova Scotia must be implemented so as to take effect immediately.

Most provinces have been considering measures for limiting the numbers of practicing physicians in their jurisdictions, either by controlling licensing requirements, or by attempting to control billing numbers, both in terms of geographic location, and by specialty.

So as to achieve a better distribution of physicians' services and to effectively contain costs on Medical Services Insurance expenditures, the Royal Commission on Health Care, upon due consideration of legal advice obtained, is of the firm opinion that the Government of Nova Scotia must immediately implement an arrangement to restrict new billing numbers to physicians wishing to practice in Nova Scotia. This arrangement ought to be implemented in a procedurally fair manner, consistent with the principles of natural and fundamental justice.

The Royal Commission, therefore, **RECOMMENDS:**

4.18 That so as to regulate the supply and geographic distribution of physicians, the Government of Nova Scotia immediately take steps to restrict new Medical Services Insurance billing numbers issued to physicians performing insured services in this province.

The Royal Commission has considered a variety of methods for achieving improved access and distribution of medical services, and for enhanced management of expenditures. It maintains, once again, that the **combination of measures** recommended in this Report will best achieve the objectives stated above.

Utilization of Physicians' Services

The previous section examined trends and projections with respect to supply of physicians. The impact of this growth in physician numbers is reflected in utilization trends:

- The total supply and use of physicians' services, after controlling for inflation, is projected to increase by almost 50 per cent over the period 1987 to 2006 given current trends and increasing numbers of physicians.
- The annual rate of increase in use of physicians' services has increased from 2.4 per cent in the late seventies to 4.2 per cent in the eighties.
- The number of services received per insured, adjusted for age and sex, has exhibited steady growth.
- In Nova Scotia, expenditure per insured person in current dollars increased five-fold from $44.82 in 1972-73 to $207.24 in 1986-87.

Analysis of past changes in fee schedules and physician practice patterns has demonstrated that control over fee increase in and of itself is not an effective means of controlling the rate of utilization of health services and physician expenditures. In fact, there is evidence that when fee-schedules are frozen, or during periods of difficult fee negotiations, there is a more rapid growth in the numbers of services provided per physician to compensate for perceived "lost income".[16]

Expenditures on Insured Medical Services

Increased use of physicians' services has paralleled the increase in physician supply, thereby resulting in significant escalations in expenditures for physicians' services.

The following financial trends can be underlined:

- Payments to physicians increased from 18 per cent of Nova Scotia's health expenditures in 1981 to 21 per cent in 1987.
- Per capita expenditure for physicians' services has grown faster than most provinces, with the result that Nova Scotia has moved from ranking sixth in 1972-73 to third in 1985-86.[17]
- Nova Scotia fees for insured services have grown more rapidly than those of other provinces and were third highest in the country in 1985-86.
- The average gross physician income in Nova Scotia from professional sources was second only to Ontario in 1986.

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16. R.G. Evans, **Squaring the Circle: Reconciling Fee-For-Service with Global Expenditure Control**. (Vancouver: Health Policy Research Unit, University of British Columbia, 1988).
17. See Figure 2.5, Expenditure per person on Physician Services, Canada and Nova Scotia.

Provinces are becoming unable, and indeed unwilling, to pay for this excessive growth in expenditures on physicians' services. As a result, there has been a new impetus to devise methods for controlling the rate of growth of physician use and expenditures.

Physician Remuneration System

Physician reimbursement policies have far-reaching implications on the cost of the health care system. The major source of funding of Nova Scotia physicians is the open-ended fee-for-service system. The rate of growth of expenditures for physicians' services is such that it cannot be sustained without serious implications for both the health care and provincial budgets. The Royal Commission believes it is time to reconsider physician remuneration, and specifically the fee-for-service mode of remuneration as the current dominant type of payment system for physicians. While appropriate for some types of practice, it may not be ideal for all practice settings. Given that the incentives built into any remuneration system are capable of influencing patterns of practice, it is important that the remuneration mode adopted be consistent with the health objectives of the system.

The Royal Commission has approached the issue of physician remuneration from the perspective of its Guiding Principles. The principles of **decentralization and regionalization** call for greater accessibility, and more equitable geographic distribution of physicians' services for the Nova Scotia population, both for general practitioners and specialists. Methods of payment for physicians' services must be designed to provide incentives that will encourage them to focus on **health outcomes**, quality of care, and patient satisfaction. The Royal Commission believes it is essential for health professionals to **participate** in the design and planning of the health care system. **Matching resources to needs** would ensure that the appropriate type and level of care was provided to health care users, while enabling government to address cost-effectiveness.

Fee-for-service must be seen as one of several options in the range of remuneration modes to be made available to physicians. It should be viewed as an incentive to guide certain types of practice patterns, and as an instrument that policy developers can adjust and refine to obtain the results desired.

As presently designed, the fee-for-service system rewards productivity and provides for a high degree of clinical freedom. It is, however, entirely open-ended with respect to total Medical Services Insurance expenditures, and thus can easily lead to escalating costs. As there are currently no limitations on the number of services a physician may provide, there is potential for over-servicing. As such, expenditures on fee-for-service programmes are difficult to predict and manage, especially when there is no ceiling imposed by government on total Medical Services Insurance outlays.

Expenditures for physicians services paid on a fee-for-service basis are determined by both the unit value of the services performed and the number of services performed. The Nova Scotia government currently exercises some control over the master unit value of medical services through bilateral negotiations with the Medical Society of Nova Scotia. However, fee-schedule negotiations which hold fee increases to acceptable levels are not sufficient, in and of themselves, to control the rate of increase in total expenditures as these negotiations do not control the number of services provided, i.e., the utilization component. This lack of control over utilization is demonstrated in the recently-negotiated agreement between the Government of Nova Scotia and the Medical Society. Over the long run, measures must be taken to constrain the rate of increase in the number of full-time-equivalent clinicians in order to contain the rate of growth of expenditures for physicians services in Nova Scotia.

Furthermore, the current fee-for-service schedule encourages certain styles of practice, and does not compensate for health promotion and disease prevention. Physicians are compensated for treating illness, and fees are not related to maintaining or improving health. Because high technology services have traditionally been more remunerative than other types of services, the fee-for-service system has encouraged the proliferation of high-tech costly procedures at the expense of more labour-intensive alternatives. Many of these high-tech procedures are unproven in clinical value or in the improvement of quality of care.

The Royal Commission believes physician payment arrangements should emphasize the following objectives:

1. Encourage the attainment of health goals.

2. Ensure highest quality of care to patients.

3. Allow for fair and adequate compensation to physicians.

4. Enable government to predict and contain costs. The current open-ended system must be modified to meet this criteria by establishing limits on reimbursement.

The Royal Commission proposes a **mixed system of remuneration**, which would provide both health care users and physicians with more options and a broader scope for choice.

Capitation and salaried payment should be introduced for physicians in certain practice settings. Capitation provides payment on the basis of the number of patients receiving care, rather than the number of services provided. Since payments are not linked to services, physicians have the freedom to determine their style of practice. Further, capitation offers physicians savings through reduced administrative workload. It offers ease of administration. Capitation is most appropriate to the provision of community-based primary care offered in Health Service Organizations and Community Health Centres. Community Health Centres and Health Service Organizations have been shown to offer quality care to patients at reduced cost to the overall health care system.

Similarly, under a salary arrangement, physician income or practice style is not affected by the number of services provided. It brings advantages, such as paid overheads, recognition and compensation for experience and expertise, and benefits, such as pensions, educational, sick, and parental leaves. It makes little sense for institutionally-based physicians, who engage in research and administrative activities, to be compensated on a fee-for-service basis, which acts as a disincentive to these activities. Clearly, any reimbursement system should be directly linked to health status results.

In view of the above, the Royal Commission **RECOMMENDS:**

4.19 That the Government of Nova Scotia introduce a mixed system of remuneration for physicians, including fee-for-service, salary, and capitation methods of payment.

4.20 That the Government of Nova Scotia develop the administrative framework and establish alternate settings for the practice of medicine, such as Health Service Organizations and Community Health Centres.

4.21 That a task force of the Provincial Health Council be established to undertake a comprehensive review of the fee-for-service schedule. This review will seek ways to adjust the schedule to support health maintenance, health promotion, and illness prevention.

4.22 That the Government of Nova Scotia establish payment to full-time institutionally-based physicians, namely pathologists, radiologists, and anesthesiologists, on a salary or sessional fee basis.

Managed Growth for Payment to Physicians

As seen above, the rate of payment to physicians for insured services has been increasing dramatically, and provincial governments across the country have been attempting to develop mechanisms to contain these expenditures. The budgetary allocation for payment to physicians on a fee-for-service basis is always an **estimate**, based on the application of new fee schedules to past data. Actual provincial outlays for Medical Services Insurance payments are the product of both the levels of fees **and provision and utilization of services during the fiscal period in question**. Thus, the province's financial liability remains completely open-ended, and actual total payments to physicians are beyond the control of most[18] provincial governments. Historically, annual outlays for physicians' services have **always** exceeded estimates.

The open-ended nature of fee-for-service reimbursement has been a decisive factor in overall cost escalation. Provincial governments have been increasingly concerned about large cost overruns and their inability to manage these expenditures more effectively. Furthermore, it has been noted that the probability of such overruns "may be perversely related to the general fiscal situation" of the province.[19]

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[18] The Province of *Québec* has implemented individual and aggregate caps on physicians' incomes since 1976-77.

[19] Evans, **Squaring the Circle**.

That is to say, tough negotiations are usually followed by an unexpected increase in use, and therefore, costs.

Expenditures are also driven upward by the increasing supply of physicians, which, as we have seen, is rising four times faster than the population. This upward trend is projected to continue unless checked by strong measures.

Likewise, the **utilization of medical care services per capita** is continuing to increase. There is no evidence of saturation in the medical care market: utilization and costs of medical services are rising in line with the increasing number of physicians.

It is clear to the Royal Commission that to exercise fiscal responsibility the Government of Nova Scotia must be able to control the rate of growth of its public expenditures. This can be accomplished through a managed growth strategy. Managing the rate of growth of total Medical Services Insurance expenditures converts an open-ended, volume-driven, fee-for-service system to a closed expenditure system, comparable to most other government programmes, where rates of growth of public expenditures are determined, within narrow limits, by the legislature through the annual budget process.

Adoption of a ceiling for Medical Services Insurance expenditures should be viewed as part of an evolutionary process whereby new policy tools and administrative mechanisms develop to better achieve particular government programme and fiscal objectives.

The Royal Commission maintains that the introduction of effective ceilings on the rate of growth of Medical Services Insurance expenditures will not compromise the access to high quality medical care now enjoyed by Nova Scotians. **The infusion of more dollars, increasing numbers of physicians, as well as the increasing use of health care services, has not been shown to yield better health results for Nova Scotians and must be brought under tighter control.**

The establishment of a ceiling on the annual rate of growth of global expenditures would allow the Medical Services Insurance fee-for-service system to continue to function as a volume-driven system up to the point where the expenditure limit was reached. Subsequently, mechanisms would be applied to prevent expenditures from rising further in that fiscal period. For example, if the global expenditure ceiling is exceeded, a year-end adjustment could be applied to fees so as to contain total expenditures at the ceiling. A uniform percentage reduction in fees would then be applied to all types of medical care services. This spreads the burden of any year-end adjustment evenly across all fee-for-service clinicians. It also leaves unchanged the relative values of different types of services.

The neutrality of this adjustment mechanism avoids the introduction of changes in financial incentives which might cause distortions in patterns of practice at the end of a fiscal period, and thereby disrupt the provision and utilization of medical care services.

This particular adjustment mechanism is also likely to have little if any effect on the annual volume of services provided by physicians. Total payments to individual fee-for-service physicians would continue to be determined by the volume and types of services provided, irrespective of when they are provided during a fiscal year. Thus the delivery of services should not be affected by whether or not a global ceiling is reached.

In view of the above, the Royal Commission **RECOMMENDS:**

4.23 That the Government of Nova Scotia adopt a managed growth strategy, with well-defined objectives, in order to achieve an orderly growth of provincial expenditures for physicians'services.

Regional Administration of Physicians' Services

In keeping with the principles of regionalization and decentralization, the Royal Commission is proposing that the administration of budgets for physicians' services be delegated to the Regional Health Authorities. The recommendation of managing growth of global expenditures on Medical Services Insurance services for Nova Scotia can be extended to the health regions. This will provide another policy instrument which could be used to promote a more even geographic pattern of medical care use per capita across health regions. Regional ceilings would allow separate target rates of growth, or expenditure limits, to be set for each Health Authority.

While professional negotiations with physicians will be centrally managed by the provincial government, funds for payment for physicians' services will be regionally-based. Payment for physicians' services will continue to be processed centrally, to take advantage of the infrastructure already developed for this purpose, with the full participation of Regional Health Authorities. A single division dedicated to administration of physicians' services programmes will help to provide equity in the payment of physicians who provide similar services, but are paid under different remuneration systems in the most cost-effective manner. The Professional Services Division of the Ministry of Health will interact with the Medical Society of Nova Scotia in matters related to physician compensation and the delivery of services. The benefit schedules for physicians' services will apply province-wide, to all remuneration systems. Year-end adjustments made in order to remain within expenditure ceilings would differ across Regional Health Authorities.

Once expenditure ceilings are reached in the separate health regions, however, each Health Authority will develop its own year-end adjustment factor to benefit rates paid to physicians who provided Medical Services Insurance services to residents of that region, irrespective of whether the services were provided within or outside that region. The year-end retroactive percentage reduction in benefit rates would differ somewhat across regions, reflecting regional differences in actual growth in expenditures for physicians' services compared to the ceiling set for that health region.

A regional global budget based on a capitation system would form the basis for budget allocation for physicians' services[20]. Allocated according to the population in each region on a weighted capitation basis, the budget would take into account age and sex mix, and other health need determinants, as the basis for funding. The funding formula based on each region's population will provide regions with resources for physicians' services in exact proportion to their projected requirements in medical services utilization. **Funding to each region would be on the basis of services for its residents, and not on the basis of the number of physicians in the region**. Thus, premiums could be awarded for services provided to residents of "under-serviced" areas, and less for services in "over-serviced" areas. Hence, this entails built-in incentives for physicians to relocate to under-serviced areas.

Budgetary allocations for physicians' services to the regions could be divided among the different types of services offered: general practice, medical, surgical, and diagnostic specialties, with the general practitioner as "gate-keeper" to insured medical services. Any budget over-run or shortfall in any one expenditure group would be applied to one or more of the other sub-budgets. In this way, financial interdependence would be created among physicians' groups, and it would become a matter of collective interest to examine and use services judiciously. Thus, this system would support the Royal Commission's principle of promoting the participation of physicians in the collective management of their patterns of practice.

The Royal Commission, therefore, **RECOMMENDS:**

4.24 That the Ministry of Health establish the administrative structure for a prospective capitation payment system for physicians' services based on the defined regions, prior to entering another round of negotiations.

Individual Physician Incomes

Questions continually arise about the fairness of the remuneration systems used to pay physicians who provide services insured under Nova Scotia's Medical Services Insurance programme.

On one level this equity discussion asks what is a fair relative value to place on the hundreds of different types of medical care services insured under the Medical Services Insurance programme. On a second level, the equity discussion centres on what constitutes fair differences in net income from clinical practice, and more generally, from professional practice, across specialty groups. At a third level, equity questions arise about the wide spread of earnings among physicians practicing within any given specialty group.

The factors which determine physician earnings are many and complex. The findings from comprehensive statistical studies of physician incomes in Canada, which standardize the influence of dozens of professional, personal, and local market factors, account for a good deal of observed differences in the incomes across individual physicians. But such studies still are unable to account for a considerable portion of the differences in earnings observed both between physicians practicing in different specialties, and between physicians practicing within the same specialty. Differences in the relative value of fee-for-service benefits paid for different services are only one of many factors which contributes to differences in gross and net clinical and professional earnings.

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[20] The following discussion is based on Evans' **Squaring the Circle**.

Nova Scotia data on the distribution of physician incomes, as reflected in gross Medical Services Insurance payments to physicians in different specialties and within the same specialty, are consistent with comparable data from other provinces. That is, there are sizeable differences in the mean gross clinical incomes both across specialties and within specialties.

The Royal Commission, after considering information about the distribution of fee-for-service payments to physicians in Nova Scotia, raised questions concerning the equity of this remuneration system, which permits a wide range of incomes to be earned by physicians practicing the same specialty. Furthermore, it is suggested that the question of physician compensation levels be examined by the Provincial Health Council in view of the mixed systems of remuneration of physicians recommended in this Report. Special consideration needs to be given to fair and equitable compensation for physicians engaged in the alternate remuneration modes and practice settings recommended herein.

Teaching Physicians

The Faculty of Medicine of Dalhousie University includes some 183 full-time and approximately 230 part-time faculty in 14 clinical departments, excluding Community Health and Epidemiology and Continuing Medical Education. Of the $200 Million paid by Medical Services Insurance to physicians in Nova Scotia in 1988-89, some $17.3 Million or 8.8 per cent was billed by full-time faculty members of the Dalhousie Faculty of Medicine. An additional $40.3 Million or 20 per cent was billed by physicians who are part-time faculty members. Additional fees paid to pathologists and radiologists through institutions amounted to $6.7 Million and $4 Million, respectively, for the teaching hospitals in 1988-89.

Physicians who hold full-time academic appointments spend time in teaching and research, in addition to providing patient care. These "geographic full-time" faculty members are given office space and secretarial support at the teaching hospitals, rather than at the university. Unfortunately, there is no standard definition as to what constitutes a "geographic full-time" faculty member or any unanimity with respect to duties and responsibilities. Moreover, there is little standardization regarding the amount of time allocated to teaching, research, administration, or patient care.

Various "plans" have been developed for the remuneration of these full-time faculty. Full-time faculty members are paid a base salary by the university, and also generate fee-for-service earnings from their clinical activities. Current arrangements at Dalhousie allow each of the 14 clinical departments to control the distribution of revenues that are primarily generated from the clinical activities of department members. In practice, these revenues also include income from other sources, such as university funds, administrative stipends, and research grants. It should be noted that, in several departments, the patient care provided by full-time faculty members, in addition to his or her teaching, research and administration tasks, is provided for less than the payments made to an "average" specialist engaged in private practice.

The Royal Commission is concerned that the present system is cumbersome and results in inadequate accountability, unnecessary administrative costs, and misunderstanding. Moreover, it believes that the Faculty of Medicine's reliance on Medical Services Insurance clinical earnings has provided a financial tool to accommodate growth in the number of full-time faculty members. Additional full-time faculty members may be added to a clinical department simply to expand its clinical programmes, without reference to provincial or institutional human resources requirements.

The Royal Commission maintains that it is time to rethink the funding of full-time academic positions in the Faculty of Medicine. There are several options available to refine the current arrangements at Dalhousie.[21] These include strengthening practice plans, block funding, salaries, and capitation. The Royal Commission believes that block funding the clinical component of these physicians' incomes would give government the desired measure of control and accountability over expenditures. It would entail obtaining government approval for new programmes and additional positions. The cost centre could be each of the 14 clinical departments or the Faculty of Medicine. Once the global budget was established, remuneration for full-time faculty members could be based on salary, fee-for-service with hard ceilings, or other payment methods.

The Health Faculties Board recommended in Chapter III would oversee the financial administration of the block funding budget allocations, and consolidate the numerous bank accounts and payment administrations systems currently in place.

In keeping with previous recommendations of a mixed system of remuneration, block funding should be introduced for the full-time academic physicians while the fee-for-service system remains in place for non-academic physicians. It is clear that earnings of full-time faculty members would not be as high as could be earned in private practice had the individual not chosen an academic career and its attendant non-pecuniary benefits. However, the global ceiling on Medical Services Insurance expenditures, as well as adjustments to the fee-for-service system proposed in this Report, should preclude the possibility of an exodus of full-time faculty to part-time status, and allow for greater consistency of earnings of full-time and part-time teaching physicians.

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[21] See, for example, the study prepared for the Nova Scotia Royal Commission on Health Care by Stevenson Kellogg Ernst and Whinney, **Practice Plans at Dalhousie University Faculty of Medicine**. This study is published in Volume III of the Research Studies of the Royal Commission.

The Royal Commission, therefore, **RECOMMENDS:**

4.25 That the Ministry of Health establish a Clinical Services Fund to be administered by the proposed Health Faculties Board as the basis for block funding the patient care services provided by full-time teaching physicians, so as to allow for better management of physician supply and public expenditures.

Physicians as Resource Managers

Accountability and management must not be seen as the sole concern of hospital administrators or bureaucrats. Health care professionals must also share the responsibility for making the system successful by participating in its planning and financial management. In the institutional setting, clinical heads must be encouraged to assume a stronger role in the management of departmental budgets. In individual or group practice, accountability for the use of health care resources should be strengthened.

Professionals should be given the opportunity to understand the impact of their individual decisions, including diagnostic testing, referrals, and drug use, on the resources of hospitals and of the larger system. The use of physicians' practice profiles, i.e. specific information on what services a physician performs, should be introduced on an individual and aggregate level, to guide informed review and examination of the use of health care resources and services. Such reviews act as a means of quality assurance in all areas of health services delivery. In a publicly-funded system, they ensure accountability for services done and resources consumed.

Financial incentives should be introduced and used to encourage sound management practice and accountable decision-making, and to encourage changes in delivery and utilization patterns within clinical units of institutions. Training should be provided to assist physicians to manage health care resources effectively, and to be accountable for their patterns of practice with ensuant implications for institutional and regional resources.

The anticipated impacts of these measures would include shorter lengths of stay, less emphasis on in-patient, institutional care, more judicious use of diagnostic testing, and lower rates of use of institutional services. The Royal Commission believes that the introduction of alternative modes for remuneration of physicians other than fee-for-service will facilitate the introduction of alternative modes of service delivery.

It is **RECOMMENDED:**

4.26 That clinical heads within institutions be provided with financial incentives for their administrative and managerial responsibilities, and that physicians be encouraged and provided with appropriate incentives to manage health care resources efficiently.

3. ASSOCIATE HEALTH PROFESSIONALS

Health professionals who assist the traditional professions of medicine, nursing, and dentistry in delivering health services include physiotherapists, occupational therapists, speech language pathologists and audiologists, medical technologists and technicians, pharmacists, clinical psychologists, social workers, and pastoral care workers, among others. The supply of these health professionals must be sufficient to carry out the functions that complete the full range of health care services.

Specialization of the medical profession and advances in technology have prompted the emergence of new health professions and technical personnel such as respiratory therapists and radiation technologists, and have increased specialization in many of these professions. An enhanced understanding of health recognizes its spiritual and social dimensions, in addition to physical and mental health, and requires a commitment to pastoral care services which address the common spiritual needs of all people, regardless of faith. An increasing demand for both habilitation and rehabilitation services has promoted growth of occupational therapy, physiotherapy, and speech language pathology and audiology. With increasing life expectancies, a greater incidence of chronic disability and long-term frailty can be expected. Service demands have also been increased by better survival rates for premature babies, accident victims, and adults with chronic diseases. Bringing the disabled into the mainstream of daily life, accompanied by an extension of publicly-insured services, has created additional service requirements.

The shift in modes of delivery of health care to ambulatory care, home care, and community-based services has greatly increased demand for the physical and psychological rehabilitation programmes which promote optimal functioning, integration, and independent living skills of injured and disabled persons.

Supply and Demand

Although the supply of associate health professionals has grown at rates greater than those of the general population, many professions are currently experiencing human resources imbalances. There are no reliable estimates of extent and there have been shortages in supply for many disciplines, indicated by unfilled positions and long waiting lists for certain services in health institutions. This shortage of human resources is a problem that has been identified at provincial, national, and international levels. Additionally, there are problems of geographic distribution of health professionals, with rural or remote areas experiencing difficulty in attracting and retaining practitioners. Various reports done by the federal and provincial governments indicate that the supply of human resources in the health system will remain insufficient to meet service requirements for many health professions and disciplines in the coming years. Shortages are expected in occupational therapy, physiotherapy, speech language pathology and audiology, pharmacy, respiratory therapy, clinical social work, and clinical psychology.

Education

Nova Scotia is the Atlantic centre for the training in many health professions. The expansion of programmes results in difficulties because of the educational process and existing shortages of qualified teaching faculty. For many professions, clinical education is provided on a ratio of one supervisor to one student, such that increased enrolments have a direct impact on the number of clinical placements required. A shortage of practicing rehabilitation professionals to act as clinical supervisors also places definite limits on expansion of these programmes. In addition to their role in training health professionals for Atlantic and Canadian needs, Atlantic universities also have an international responsibility in training health professionals for other countries where training programmes are not available.

The use of "auxiliary personnel", or assistants to health professionals, is a means of supplementing the supply of health professionals currently experiencing human resources shortages. Given proper training and supervision, auxiliary personnel such as certified nursing assistants, physiotherapy aides, or pharmacy assistants, can perform many of the more routine and supportive tasks now carried out by more highly-trained professionals. This approach seeks to use the most cost-efficient mix of personnel, leaving professional resources free to perform tasks more appropriate to their training.

The use of auxiliary personnel is generally limited in Nova Scotia. This issue is being reviewed to determine the advisability of expanding training programmes in the new community college system. Providing a common core curriculum for rehabilitation professions through the community colleges, with subsequent on-the-job institutional training, would produce an annual supply of graduates with standardized skills and knowledge.

Recruitment

Increased educational output alone does not ensure increased supply of practitioners within a particular jurisdiction. Strategies aimed at retaining graduates should be used in combination with expansion of training programmes to insure an increased supply. Competitive recruitment policies must be developed in conjunction with increased educational output.

Unlike some provinces, Nova Scotia does not offer special incentives to retain graduates of health programmes within the province. Specific incentives offered by institutions in rural areas are important for ensuring equity of access. As with many other professional groups, it is difficult to ensure an adequate supply in rural areas. Factors including isolation from colleagues, extra pressures of practice and administration in sole charge, i.e., one person, departments or small hospitals, personal or family preference for more urban settings, and high service demands make recruitment to rural areas difficult. Bursaries can be offered to students from rural areas, requiring a return of service to that institution upon graduation. This approach addresses both overall supply and regional distribution of personnel. Other examples of incentives include signing bonuses and payment of part or all of the student's tuition. The Nova Scotia Hearing and Speech Clinic, for example, requires a two year placement of staff in satellite clinics as a means of providing services to outlying areas. This approach should be encouraged and emulated where possible.

Evidence from other jurisdictions, however, suggests that the incentive approach has limitations. A graduate not wishing to return his or her service commitments can "buy out" the contract, or have it bought out by a competing institution. Furthermore, return-of-service contracts may insure only short-term human resources supply. When the term is expired, personnel often can be expected to leave the area.

Recruitment of foreign-trained professionals has been a method of increasing the supply of health practitioners in Canada. For some professions, such as physiotherapy, speech language pathology and audiology, and medicine, there has been a heavy reliance on immigration of professionals. In 1986, foreign-trained professionals entering Canada represented 34 per cent of the educational output for physiotherapy, 55 per cent for speech language pathology and audiology, and 18 per cent for occupational therapy. Atlantic Canada's dependence on foreign-trained professionals is even more extensive. Foreign-trained professionals constituted 56 per cent of the educational output for physiotherapy, 53 per cent for occupational therapy, and 44 per cent for speech language pathology and audiology.

Importation of foreign-trained professionals, a strategy that can be easily regulated as shortages occur, remains an important supply of human resources and source of expertise and experience. It is limited, however, by the unreliability of foreign supply owing to international shortages of many professions and disciplines. It should not be depended upon in the long term to address supply problems. The recruitment of professionals from international markets is difficult and time-consuming. Supplemental educational programmes to enable upgrading of skills to meet provincial and national standards are often needed.

The Royal Commission therefore **RECOMMENDS**:

4.27 That the Government of Nova Scotia, in conjunction with the other Atlantic provinces and the universities involved, establish enrolment targets that recognize demonstrated regional needs, as well as national and international interest in educational programmes for the associate health professions.

4.28 That the Government of Nova Scotia develop training programmes for, and expand the use of, auxiliary personnel for rehabilitation services such as physiotherapy and occupational therapy. Specific training requirements, service functions, and supervisory conditions must be determined as preliminary steps.

Worklife Issues

As discussed previously with respect to nurses, longer term strategies with respect to the supply of health professionals must address the inherent problems of career structure. Health administrators in this province and in other jurisdictions have not paid sufficient attention to **retention** of the professionals they have trained and recruited.

Loss of health personnel takes place through both inactivity and attrition. Inactivity is temporary absence from practice, usually for reasons of childbearing and family responsibilities, but also for reasons of continuing education, professional development, and job dissatisfaction. Losses due to inactivity are demonstrated in fewer full-time workers and greater numbers of part-time and casual workers. Attrition occurs as professionals exit the labour force and either move away or into other fields of practice. This latter form of attrition is in fact a loss to the profession of a pool of experienced and qualified members. It appears to be predominantly a result of dissatisfaction with the current career structure and worklife conditions.

Inactivity rates for Nova Scotia were very similar to averages for other provinces. Attrition rates, on the other hand, for Nova Scotia, and for the Atlantic region generally, were considerably higher, reflecting both a higher level of mobility of these professionals and voluntary exit from practice. Attrition rates for both physiotherapy and occupational therapy averaged 14 per cent, while speech-language pathology and audiology averaged 6 per cent. The combination of attrition and inactivity rates shows that a large percentage of the existing supply of therapists is ceasing to practice.

Part-time practice also represents a net loss of full-time equivalents available to fill positions. Close to 20 per cent of occupational therapists and speech language pathologists, and 25 per cent of physiotherapists, are employed on a part-time basis in Nova Scotia.

Many professionals choose to leave institution-based practice to pursue private practice. Several professions have experienced loss of practitioners to private practice as a result of low satisfaction with careers in the public sector. The most notable growth of private practice in Nova Scotia has been in physiotherapy. 22 per cent of all registered physiotherapists in the province are practicing either fully or partially on a private basis, up from 5 per cent five years ago.

Exit of professionals from the public sector has qualitative as well as quantitative implications. Professionals specialized in certain aspects of institutional care can be under-utilized in the private sector, which caters to orthopedic physiotherapy, and other more routine rehabilitation needs. A physiotherapist with specialized expertise and experience in the field of pediatric neurology, for example, is highly under-utilized in private practice, which may not be able to support such a specialized service on an outpatient basis.

As with nursing, two key factors are instrumental in explaining the low retention of these health professionals in Nova Scotia. The first is the age and gender of the professionals themselves. The second arises from problems inherent in the professions — their career structures and the concomitant low levels of job satisfaction. Most of the health professionals, particularly those specializing in occupational therapy, physiotherapy, speech language pathology and audiology, social work, and pharmacy, are predominantly female and young. Their members can thus be expected to temporarily leave the professions as childbearing and family responsibilities come into play. They can also be expected to migrate, as necessitated by career moves of their spouses.

Remedies similar to those suggested for nursing can be used to address the inactivity and attrition that results from demographic characteristics of many of the associate health professionals. These measures are fairly straightforward: an aggressive approach must be taken to bring professionals back into practice. Re-entry to practice can be facilitated by providing refresher courses and re-entry programmes. Institutions can provide for a flexible and responsive work environment, supportive of family responsibilities, through accommodation of part-time practice, flexible working hours, and through such means as the provision of on-site child-care services where viable.

Although the age and gender characteristics displayed by some of the health professions contribute to turnover and retention problems, it is important to examine their inherent characteristics to explain low rates of participation. Analyses of job satisfaction within the occupations under review underline the importance of accomplishment and opportunity for advancement. Surveys done of physiotherapists in Nova Scotia in 1984 and at the Victoria General Hospital in 1987 and 1988[22] indicate that the areas felt to be most important professionally were sense of accomplishment in work, adequate time for direct patient care, independent decision-making, opportunity for career development, and the clinical area of practice. The areas with which they were most dissatisfied were many of these same areas, namely, the lack of opportunities for career development, lack of opportunity and resources for continuing education, the amount of paper work as opposed to direct patient care, and the wages and fringe benefits. Similar findings have emerged for the occupational therapy profession.

The problem of job stress is an important issue in turnover and attrition. Salaries have also been singled out. Salaries in Nova Scotia, and in Atlantic Canada generally, are not competitive with those in other parts of the country. Also, the ranges are compressed for many professions. For example, in the salary scale for occupational therapy and physiotherapy, a therapist can move from the bottom to the top of the scale in three to five years. Analyses of salary scales for occupational therapy and physiotherapy show that the ranges from bottom to top in Nova Scotia are the most compressed in the country.

Salary scales do not take into account experience, responsibility, or seniority. Nor do they adequately reflect differences in educational qualifications. For hospital social workers, pay scales for undergraduate and graduate degrees converge after three to four years. In occupational therapy, no differentiation in pay scales exists for a graduate level of education.

Opportunities for career advancement have been identified as integral to job satisfaction. The career structures of most health professions are not designed to allow for recognition of expertise, with the result that advancement can only be

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22. Nova Scotia College of Physiotherapists, **Job Turnover Survey** (Halifax: 1984) [Unpublished]; and Information supplied from Victoria General Hospital Physiotherapy Department Job Satisfaction Questionnaire (Halifax: 1988) [Unpublished].

achieved by career change. The professional must leave clinical practice for management or administration positions. This trend is occurring in many of the health professions.

Development of specialization within the health professions has been suggested as a means introducing a career structure. Resources must be made available for development of continuing education leading to specialization, with a process for accreditation of specialties, and parallel steps in the salary scale. Specialization may be an effective means of fostering satisfaction and challenge in health professional development and of meeting identified community health needs.

It is clear that more than salaries and benefits must be addressed when looking at job satisfaction and retention. Recommendation of more competitive salaries, job flexibility, and re-entry programmes should not be seen as a cure-all to redress problems related to job satisfaction. More fundamental matters must be addressed, such as the lack of adequate career structures and incentives to retain qualified and experienced health professionals.

These problems are beginning to be addressed by many of the health professions. Professional associations must, in conjunction with institutions and government, develop structures that will allow professional advancement to occur. Governments cannot ignore these problems, and must recognize the importance of career structure and provide appropriate funding for parallel ladders of career development. Professionals must be allowed to participate in the decision-making structures of health institutions, and must be well represented in the policy-making processes of governments. Until this occurs, many health institutions will continue to experience loss of qualified and experienced practitioners through inactivity, attrition, and the move to private practice.

The Royal Commission therefore **RECOMMENDS:**

4.29 That the Ministry of Health review and plan for an appropriate supply of the associate health professions; that salary scales be examined and revised, and career structures created for the associate health professions, so as to reflect seniority, responsibility, and educational attainment.

4.30 That worklife conditions of the associate health professionals be addressed in order to reduce the loss of professionals through attrition, inactivity, and job dissatisfaction through the provision of options allowing for greater flexibility, such as "flex" time, job sharing, leaves of absences, extended parental and education leaves, and deferred salary leaves.

4.31 That workload measurement systems be established so as to ensure appropriate staffing levels for the associate health professions.

Implementation Schedule — Chapter IV

		1990-91	1991-93	1993-96
4.01	▪ Develop a comprehensive health human resources plan.	→	→	
4.02	▪ Explore new modes of delivery for the services of all health professionals.	→	→	
4.03	▪ Place utmost priority on the planning of nursing human resources.	→		
4.04	▪ Evaluate the role of certified nursing assistants.	→		
4.05	▪ Provincial Health Council to address the worklife issues of nurses.	→	→	→
4.06	▪ Initiate a demonstration project based on the principles of participatory management.	→	→	
4.07	▪ Health Council to make recommendations on entry to practice, career structures and continuing education for nurses.	→	→	
4.08	▪ Staffing guidelines be updated to reflect funding for training, educational leaves and staff replacement. Develop programmes to strengthen management skills for nurses.	→		
4.09	▪ Strengthen role of nursing in primary care.	→	→	→
4.10	▪ Develop demonstration project that expands the role of nursing in a community setting.	→	→	
4.11	▪ Place utmost priority on physician human resource planning strategies.	→		
4.12	▪ Establish targeted growth rates for physicians.	→	→	→
4.13	▪ Determine regional requirements for physicians.	→	→	→
4.14	▪ Work towards a federal-provincial agreement on physician human resources.	→	→	→
4.15	▪ Work towards a national reduction of 25 per cent in total undergraduate medical school enrolment.	→	→	→

		1990-91	1991-93	1993-96
4.16	■ Establish medical staffs of hospitals at levels appropriate to the roles established in Regional Services Plans.	→	→	→
4.17	■ Growth in institutional medical staff be based on Regional Services Plans and human resources planning, subject to impact analysis, and Regional Health Authority and Ministry of Health approval.	→	→	→
4.18	■ Restrict new Medical Services Insurance billing numbers.	→	→	
4.19	■ Introduce a mixed system of remuneration for physicians.	→	→	→
4.20	■ Develop alternate settings for the practice of medicine.	→	→	→
4.21	■ Undertake a comprehensive review of the fee-for-service schedule.	→		
4.22	■ Establish salaries or sessional fees for full-time institutionally-based physicians.	→	→	
4.23	■ Adopt a managed growth strategy to control provincial expenditures for physicians' services.	→	→	→
4.24	■ Establish the structure for a prospective capitation payment system for physicians.	→	→	
4.25	■ Establish a Clinical Services Fund as the basis for block funding the patient care provided by full-time academic physicians.	→		
4.26	■ Encourage physicians to manage health care more efficiently.	→	→	→
4.27	■ Establish enrolment targets for associate health professions.	→	→	→
4.28	■ Train and expand the use of auxiliary personnel for rehabilitation services.	→	→	→
4.29	■ Plan for an appropriate supply of associate health professionals.	→	→	→
4.30	■ Address worklife conditions of associate health professionals.	→	→	→
4.31	■ Establish workload measurement systems for associate health professionals.	→	→	

CHAPTER V
REVITALIZED SERVICES

INTRODUCTION

The primary objective of the province's health care system is to deliver programmes and services that meet the needs of Nova Scotians. It is at the point of service, be it the home, the community health centre, the physician's office, the school, or hospital, that the system comes into contact with Nova Scotians. While the Royal Commission appreciates the value and priority Nova Scotians place on their health care system, it is also aware of the concerns which must be addressed in order to strengthen and improve the system to enable it to meet future health needs.

Earlier chapters have addressed the economic imperatives confronting the province as it enters the 1990s, and the strategic directions and structural changes required to achieve a balance in health services. The recommendations put forward by the Royal Commission in this Report are intended to improve the planning and policy development process to revitalize health service delivery. The creation of a Provincial Health Council and re-organization of the Ministry of Health will allow for a participatory and coordinated approach to health policy at the provincial level. At the same time, the development of decentralized, regional operations for health services will provide for broader participation in decision-making within the framework of a provincial Comprehensive Health Policy, promoting greater equity and flexibility in the provision of health services.

This Chapter will address the nature and scope of selected services, as well as a number of specific service issues identified in the Order-in-Council, discussing how they can best meet the health needs of Nova Scotians. It is essential that planning, management, and funding structures of the entire health system be focused on providing high quality programmes and services in a cost-effective manner.

Further, the Royal Commission believes that, at all points where decisions are made with respect to health services, consideration must be given to their ethical implications. The Royal Commission maintains that an open, ongoing, province-wide discussion chaired by the Ethics Committee of the Provincial Health Council must take place to determine the kind of health services that should be offered in Nova Scotia. The ethical implications of euthanasia, *in vitro* fertilization, and other reproductive technologies, among many issues, need to be discussed and resolved at the societal level. Allocation of resources must be examined: a closer relationship should be established between actual health needs and resources. Emphasis and priorities must be considered: dollars spent, for example, on unnecessary hospital beds constitute funds not available for other health services, such as chronic care, palliative care, home care, and pastoral care. Precise objectives with respect to health outcomes should be set, which will determine what programmes and services are offered.

This Report has made reference to the need to **shift emphasis in the health system's orientation**, which will involve fundamental directional changes. The system, as it has evolved over the past two decades, has maintained a focus on institutional care and physician services. A shift from this model will entail significant implications for the future planning and provision of health services.

The Royal Commission maintains that a better balance should be struck in the allocation of resources between the curative and preventive components of the health care system. Benefits derived from the promotion and protection of health have been well documented and are increasingly recognized. These initiatives, as detailed in the earlier discussion on a Comprehensive Health Policy, will involve a combination of health, social, educational, environmental, and economic measures, rather than curative efforts alone.

The delivery of health care has traditionally been located in institutions, primarily hospitals. While they are and will continue to be focal points, there is increasing understanding that many health care services can be provided safely and appropriately outside of the institutional setting. Where appropriate, services can be provided in settings such as community clinics, ambulatory care centres, and the home. **This shift in delivery setting from institutional care to community-based care** will offer many opportunities to institutions and community agencies to explore innovative programmes to meet the needs of specific groups. Many examples of such innovation exist and further initiatives should be encouraged.

The traditional health care delivery model placed the patient or user in a passive role. This perception gradually evolved as the concept of informed consent developed. More recently, the user or patient has come to be accepted as an active and equal partner in his or her own health care. The Royal Commission strongly supports this **shift in emphasis to user participation**. The discussion in this Report on public education about proper use of health services, as well as public health education generally, recognizes and endorses this active role for every Nova Scotian.

The new Strategy for Health will call upon health care users, professionals, agencies, and institutions to actively participate in the decision-making process, thus involving the community in the planning and design of health programmes to a greater extent. All of these changes should result in a population and communities better able to control and care for their health and well-being. A stronger appreciation by the government of the benefits of community participation in the definition of health goals and programme planning is essential to the fulfillment of these changes. Community involvement in the planning and delivery processes draws in practical expertise and experience, benefiting all participants.

A comprehensive approach to health services will involve a broad range of services, programmes, and initiatives to form an integrated health care system. The Royal Commission has observed that while a range of health services does exist in Nova Scotia, certain elements are less well developed than is necessary to meet needs in an effective manner. New services, such as environmental medicine, need to be developed to meet the evolving health needs of the population. Health promotion, home care, rehabilitation services, chronic care, palliative care, and pastoral care are programmes which need to be strengthened and made evenly accessible, to offer Nova Scotians comprehensive health care services.[1] **A comprehensive range of appropriate health services must be available for all stages of the life cycle, from pre-natal care to care for the terminally ill. These services must also span the entire spectrum of health care, providing preventive, curative, rehabilitative, and palliative care to residents of the province.**

As was pointed out to the Royal Commission during its Public Hearings, inappropriate utilization is often the result of a lack of more appropriate services. For example, use of hospital outpatients departments for care which could be provided in a physician's office, is often due to the lack of access to physician services after normal business hours; prolonged stays in acute care hospitals may be due to the lack of intermediate or long-term care programmes.

As discussed in Chapter IV, a better mix of health care professionals and new entry points to care will help to achieve a more appropriate and efficient use of health services. A wider range of settings for the delivery of health care must also become available. The cooperation of all health care professionals and health service institutions will be required to achieve the coordination necessary for continuity of health services. The Royal Commission believes that the development of truly comprehensive health services will reduce "inappropriate utilization", increase the effectiveness of treatment, improve the accessibility of services, fulfill unmet health needs, and contain costs.

1. COMMUNITY HEALTH PROGRAMMES

Until recent decades the concept of health focused upon the absence of illness or infirmity. Today, the common understanding of health has been expanded considerably to include a broader view of the complete physical, spiritual, mental, and social well-being of the individual. Health is considered in terms of the ability to achieve one's potential and to respond positively to the challenges within the social and physical environment. A social view of health recognizes the impact which physical, socio-economic, and cultural aspects have on the health of a community. This broad view is adopted by the Royal Commission through its advocacy of a Comprehensive Health Policy.

A community is not only to be viewed as a group of people living in proximity, but also as a group of people who share common interests or concerns. It may refer to an ethnic or cultural group, a neighborhood, those who share similar social, economic or health conditions, or even a group of organizations or agencies with common interests. This broad view is important for understanding the emergence of community-based programmes and strategies for health care planning.

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[1] While the Royal Commission recognizes many non-traditional health care services, and does not discount the value of these modes of treatment, the focus of this Report, by reason of the Royal Commission's mandate, is on insured health care services.

Traditionally, the health system has primarily dealt with illness after its onset. This has resulted in extremely high cost-benefit ratios, since resources are directed towards acute and tertiary care, where the costs of facilities, equipment, technology, drugs, and physician services are greatest. Alternately, attempts to prevent health problems by calling upon individuals to change their habits or lifestyles, and communities to improve their environments, have been made without providing the resources necessary to make the basic shifts in the underlying situations that will encourage change.

A social view of health implies that planned change should be aimed at those aspects of the community environment which cause ill health. The community development approach seeks to mobilize the resources and skills of the community itself on the assumption that when community members are empowered to take more control over their lives, they will be motivated to work together for their mutual benefit.

It is clear from experience that communities can work together to change factors that affect their lives. Under the decentralization model proposed by the Royal Commission, communities could identify their own health issues, decide what to do about them, then build the consensus necessary to move towards solutions. Government should encourage progress by providing information and skills to assist communities to organize themselves to take action on health issues or gain access to services appropriate to their need. Health care programmes and services are improved by increasing their relevance and responsiveness to the needs of the communities.

Community health programmes represent a great potential for improving the health status of Nova Scotians through illness prevention, public education, and health promotion programmes. Successful programme development in community health must be based on stated health goals and objectives towards which progress can be measured. The Provincial Health Strategy will be implemented through programmes set out in the Regional Services Plans. These will provide a framework for communities as well as health care facilities and professionals.

The development of community health programmes will require appropriately trained professionals with a wide range of skills, such as community needs assessment, programme planning and evaluation, data management, and health promotion.

Health Promotion

The Royal Commission frequently heard of the need to increase health promotion and disease prevention activities in this province. The Community Health Services Division, which administers these programmes, was allocated four per cent of the total health care budget in the 1989-90 fiscal year. The Royal Commission sees community-based programmes as essential to the future health of Nova Scotians as well as to the effective management of health care resources. Specifically, prevention and promotion can be defined as follows:

Primary Prevention: Prevention of a disease prior to its occurrence.

Secondary Prevention: The early recognition of a disease to permit early intervention to prevent more serious development or to effect a complete cure.

Health Promotion: Enabling people to increase control over and to improve their health.

While recognizing the individual's responsibility to influence his or her own health status, policies must address the external social, educational, and environmental factors which affect society's ability to improve health status. This policy should be based on the fundamental concepts of primary and secondary prevention and health promotion, and address the three challenges presented by the federal government in its 1986 policy paper, **Achieving Health for All**,[2] which are:

1. to reduce inequities in health status among Canadians;
2. to increase efforts to prevent disease; and
3. to enhance individual and community capacities to cope.

Health promotion and disease prevention policies must be developed in an ongoing, participatory process subject to regular evaluation and redirection as required. An effective health promotion and disease prevention strategy should be based on the Provincial Health Goals as determined by the Provincial Health Council and directly aimed at addressing the needs of the population as identified by health status assessments. As an initial starting point, the Royal Commission sees three specific areas as holding significant potential to improve the health status and to reduce the occurrence or severity of illness among Nova Scotians. These are cardiovascular disease prevention, smoking cessation and injury prevention.

The Royal Commission **RECOMMENDS:**

5.01 That the Ministry of Health reallocate non-transferable resources to foster the development of health promotion and community-based programmes based on a Comprehensive Health Policy:

(a) That community health programmes receive an increased budget allocation equal to one per cent of the budget of the Ministry of Health in each of the next five years; and that this reallocation take place in a planned manner, allowing for the development of the administrative capacity to implement such programmes;

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[2] Health and Welfare Canada, **Achieving Health For All: a Framework for Health Promotion** (Ottawa: 1986).

(b) That the Ministry of Health establish a Community Health Initiatives Fund in support of health promotion and illness prevention projects at the community level. This fund, to be regionally administered, will consist of $1 per capita per annum and have a five year life span.

2. COORDINATED HOME CARE

The Coordinated Home Care Programme is an example of the interdepartmental, interdisciplinary, and intersectoral approach to service delivery that the Royal Commission supports for many aspects of health and related services. The programme is a collective effort of the Departments of Community Services, Health and Fitness, Housing, Municipal Affairs, and the Senior Citizens' Secretariat. The administration and delivery of services engages a variety of health and community service professionals, auxiliary workers, and voluntary agencies. This coordination, coupled with the single point of entry into home care, facilitates access by potential users and provides for comprehensive services.

The limited target groups and level of care has caused some concern to the health community generally and to the Royal Commission. In its initial stages the three target groups for the Coordinated Home Care Programme are those over 65 years of age, the disabled and families "at risk". Home care is directed at those with long-term, continuing needs who might otherwise require placement in a home for special care or similar institution. The Royal Commission appreciates the necessity for short-term limitations while introducing such a complex programme in order that programme quality and effectiveness can be maintained.

The Royal Commission believes the Coordinated Home Care Programme should be expanded to coordinate with acute and chronic institutional services including ambulatory care and early discharge programmes. The programme should also be evaluated, including a review of programme effectiveness and the financial arrangements with municipal and voluntary agencies to ensure they are adequate.

It is **RECOMMENDED:**

5.02 That the following steps with respect to the Coordinated Home Care Programme be taken:

(a) development of an evaluation process which includes measurement of programme effectiveness;

(b) a review of the human and fiscal resources allocated to the Department of Community Services and the Ministry of Health for Coordinated Home Care;

(c) the expansion of target groups and eligibility criteria to address acute health care needs of all age groups, including the terminally ill; and

(d) coordination of Home Care with acute and chronic institutional services, including early discharge programmes.

3. INSTITUTIONS

As part of the new **Strategy for Health**, it will be necessary for all types and levels of health care institutions to reassess their roles and define their mission within the framework of the provincial and regional plans. **Health outcomes** must guide the definition of this process. Institutional mandates will need to be set within the Regional Services Plans and form part of an integrated facilities strategy which links all health care facilities within the region. An increased emphasis must be placed on ambulatory and community-based care. Opportunities will be available for communities and institutions to establish linkages with respect to health services delivery.

Some community hospitals must reassess their missions to place greater emphasis on primary care. While concentrating on outpatient services, such as ambulatory care, day hospital services, and respite care, small community hospitals might also provide a setting for other health and community services. Some may evolve into community health care centres. Chapter VI further discusses and proposes recommendations for the role of institutions within the Regional Services Plans, to provide the highest quality and most appropriate institutional health services for Nova Scotians.

4. FURTHER RELATED SERVICES

All definitions of health recognize the significance of many factors in determining the well-being of an individual. The emphasis on the treatment of illness in the health care system has resulted in a tendency to overlook the importance of some other aspects of care that promote individual well-being during or following medical treatment. Equally important are services which assist an individual to cope with his or her condition, such as rehabilitative services, palliative care, and pastoral care. Common to all these services is a need for coordination, integration and accessibility within the health care system and throughout the province.

Pastoral Care

One factor contributing to good health is the spiritual dimension of an individual regardless of religious belief or faith. Spiritual concerns include those related to the meaning and purpose of life, suffering, and death. Pastoral care seeks to encourage and enable self-understanding, and an awareness of one's spiritual resources.

There is evidence that spiritual health contributes to health status, lowers the cost of health services and increases their effectiveness.[3]

The Royal Commission believes that pastoral care services are an integral part of the health system as reflected in the guidelines established by the Canadian Council on Hospital Accreditation. It recognizes that the spiritual needs of those who utilize health services and those who provide them are significant. It believes pastoral care should be professionally planned, directed and coordinated within the health regions, and implemented by appropriately prepared and supervised pastoral care workers.

It is therefore **RECOMMENDED:**

5.03 That the guidelines established by the Canadian Council on Hospital Accreditation with respect to pastoral care services be met by all hospitals in Nova Scotia; that provision for appropriate clinical pastoral care be made through regionally-administered health services budgets; finally, that human resource planning and management be done in collaboration with the Institute for Pastoral Training.

Rehabilitation Services

Rehabilitation involves restoring the individual to full or optimal health following injury or illness. In Nova Scotia, these services are focused at the Nova Scotia Rehabilitation Centre in Halifax. The initiative and leadership of this institution, and its expansion, are recognized by the Royal Commission. It is clear, however, that there is a need to ensure that treatments begun in tertiary care institutions are followed through adequately when patients return to their homes. Continuity in treatment can break down if there is a gap in services. The Royal Commission believes a commitment to services which assist an individual to function optimally within his or her environment should be a fundamental part of health policy and programmes.

It is therefore **RECOMMENDED:**

5.04 That a review be undertaken by the Ministry of Health and the Provincial Health Council to ensure the completeness of rehabilitation services in the institutional, community, and home settings.

Palliative Care

Palliative care represents a very special aspect of health care when a cure is no longer possible. It compels the dedication of a small number of professionals and volunteers whose efforts have traditionally been practiced in the hospital or institutional setting. The Royal Commission recognizes the Hospice Programme at the Victoria General Hospital, the palliative care initiative at the regional and community levels and especially welcomes the Palliative Care Teaching Unit at the Halifax Infirmary. There is, however, a growing recognition that much palliative care occurs in the home and that often a relatively small proportion of individual and family time needs to be spent in the hospital. Appropriate educational programmes should be provided on a continuing basis to patients, family caregivers, and palliative care workers.

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[3] See, for example, John Milsum, "The Determinants of Health Revisited". **Canadian Journal of Public Health**, Volume 80 (July/August 1989):235-236

It is therefore **RECOMMENDED:**

5.05 That palliative care programmes be recognized as integral components of health services at the tertiary, regional, and community levels; that upon assessment and admission to a palliative care programme, an individual be eligible for all required medication, supplies, and services as a part of the insured health services in any institutional, community, or home setting approved by a physician.

5. MENTAL HEALTH SERVICES

The field of mental health is a complex, multi-disciplinary, and multi-agency field. Users of the services are often reluctant to seek help and sometimes present the most difficult problems of all patients in the health care system. There is continual debate among both professionals and patients about treatment choice and efficacy of therapies.

The Psychiatric Mental Health Division of the Department of Health and Fitness spends 80 per cent of its budget on inpatient hospitalization services. Few of its activities could be described as community mental health services. The Royal Commission's recommendation to drop the term "Psychiatric" in the Division's name signals a proposed broadening of approach.

The Division has few resources committed to research and evaluation, as its time and energies are consumed by the problems and issues of inpatient psychiatric services. Psychiatric outpatient services offered through mental health clinics need to be properly evaluated in order to clarify their appropriate function and role within the field of mental health care, as well as to develop strategies for delivering multi-disciplinary mental health services. Planning and information requirements for mental health services need to be reviewed, and the overall quality of care evaluated, with a view to increasing the emphasis on community mental health services and mental health promotion.

A planned role study of the province's largest psychiatric hospital, the Nova Scotia Hospital, should contribute significantly to the rationalization of inpatient psychiatric services among the tertiary care centres, the regional hospitals, and the community hospitals. This role study can aid in assisting the Division to adopt a broader leadership role across the entire range of mental health services. However, the Ministry must provide the Division with the resources to do so.

It is anticipated that the delegation of programme management to the Regional Health Authorities will add strength to the Division's expansion into community mental health services. Mental health must be incorporated into health promotion programmes, as an integral part of health. Efforts to eradicate the stigma still associated with mental health must be continued. The gaps in the range of mental health services, particularly in rehabilitative and community support services which were described to the Royal Commission in the Public Hearings, must be addressed. The leadership role of the Mental Health Services Division of the Ministry of Health in the improvement of mental health services in Nova Scotia must be fully exercised.

The specialty of child psychiatry continues to experience a steady increase in demand for services. In Halifax-Dartmouth, the waiting period between initial referral and first appointment for assessment is routinely three months or longer. Halifax has experienced a serious net loss of child psychiatrists and the Atlantic Child Guidance Centre has restricted admissions by refusing out-of-metro referrals. Most of the regional mental health centres do not adequately meet the needs of children. Outside of Halifax-Dartmouth, there is currently only one child psychiatrist in New Glasgow and another in Kentville. This serious gap in services to a vulnerable segment of the population must be immediately addressed. As noted in Chapter II, there is a concern being expressed regarding the self-esteem of young Nova Scotians. It has been demonstrated that delay in providing services frequently leads to more severe mental health problems, as well as to a greater likelihood of long-term social problems, and even criminal behaviour.

Under the Young Offender's Act, the courts require assessments of adolescents that the psychiatric facilities have been unable to provide. Usually, these facilities have refused to provide an "assessment only" service, as the court's requirement would lengthen waiting periods for their own patients. The response of the justice system has been to purchase assessment service from clinical psychologists. A "court clinic" with specialized resources would help solve this problem of availability of required services. The court clinic would provide not only assessments of young offenders, but also assessments for the purpose of custody suits and for children under care by the Department of Community Services.

There is also a need to more effectively provide care for the mental health of Nova Scotia's correctional centre population. About 20 per cent of the prison population is mentally ill, and there is frequently a revolving door between the psychiatric hospital and prison. The new forensic facility which has been proposed will only be a partial solution. Helping the mentally ill prisoner requires strong coordination links between mental health staff and the Solicitor General's Department. Provision of appropriate mental health services can fulfill a preventive role in terms of both mental or emotional illness and further criminal behaviour.

Professional literature demonstrates the cost-effective potential of psychological services within a health care system. In Chapter IV the Royal Commission has recommended a review of the health professions and advocated a more efficient and effective use of health professionals in the health care delivery system as a whole.

Use of clinical psychologists represents an opportunity to achieve greater cost-effectiveness in the delivery of some mental health services which the Royal Commission believes should be pursued. The Regional Health Authorities will have the option to explore the concept of extending hospital admissions privileges to clinical psychologists.

The breadth of mental health services in Nova Scotia has been and will continue to be a product of multi-agency effort, requiring both coordination and a dynamic, consultative, style of leadership. The Department of Community Services also plays a major role in the provision of community-based mental health services. For this reason, the Royal Commission believes that the area of community mental health is one appropriate for the appointment of coordinators in the Department of Community Services and in the Ministry of Health.

The Royal Commission therefore **RECOMMENDS:**

5.06 That the range of services for mental health provided by the Ministry of Health be significantly broadened beyond the institutional services which presently dominate the mental health budget; and that additional administrative and staffing resources be provided to support this expansion.

5.07 That the name of the Psychiatric Mental Health Division be changed to Mental Health Division to emphasize this new, broadened focus.

5.08 That the Ministry of Health conduct a major evaluation of psychiatric outpatient services provided by hospitals and mental health centres.

5.09 That until such time as there are sufficient Canadian-trained psychiatrists, the Ministry of Health make a concerted effort to recruit American-trained psychiatrists and respond immediately to the manpower requirements in child psychiatry.

6. DRUG AND ALCOHOL REHABILITATION PROGRAMMES

An extensive network of services has emerged in Nova Scotia as a result of cooperative efforts between the Commission on Drug Dependency and other agencies which provide drug and alcohol rehabilitation services. The Commission on Drug Dependency is commended for having clearly established and implemented its policy objectives and mission. The present drug and alcohol rehabilitation programmes are regionally-based and generally efficiently administered and coordinated. This network of services has been further facilitated by the participatory philosophy of management of the Commission on Drug Dependency. The Royal Commission recognizes the efforts of all agencies whose activities have contributed to drug and alcohol rehabilitation of Nova Scotians.

While variations in service delivery of drug and alcohol rehabilitation programmes throughout the province have resulted in experience with various models, some inequities in the accessibility and range of available services have emerged. The lack of central coordination for funding of all drug and alcohol rehabilitation programmes has resulted in an inconsistent policy on federal cost-sharing. The provincial government and agencies providing these services should pursue all cost-sharing opportunities for drug and alcohol rehabilitation programmes.

The Vocational Rehabilitation of Disabled Persons Agreement between the federal and provincial governments will share fifty per cent of selected costs of drug and alcohol rehabilitation programmes which meet specific cost-sharing criteria. For this reason, it is important that hospital-based programmes be structured in such a way so as to enable them to recover a portion of their costs from this federal funding source. Additional funding available from the Alcohol and Drug Treatment and Rehabilitation Agreement under the National Drug Strategy should also be pursued.

Administration of drug and alcohol rehabilitation programmes through the Regional Health Authorities will provide for coordinated and equitable programme delivery, while maximizing cooperation with other health-related agencies. The current field staff of the Commission on Drug Dependency will be merged with the Public Health Units in the regions, providing services under contract with the Regional Health Authority. The Regional Health Authorities' boards should include representation from the community groups which currently advise the Commission on Drug Dependency.

The Royal Commission has noted that the quality of the physical facilities administered by the Commission on Drug Dependency needs improvement. Many of the present locations are inadequate and dispiriting for a rehabilitation programme. There is currently no capacity to provide segregated accommodations for women. Furthermore, given the present resources, the demand for services cannot be met. As a significant example, the Royal Commission was told that in the Halifax-Metro region, the site of the rehabilitation centre on the grounds of the Nova Scotia Hospital is viewed by many people to be unacceptable, thus contributing to the reluctance of patients to seek admittance.

The Royal Commission therefore **RECOMMENDS:**

5.10 That the Ministry of Health allocate resources for improved facilities, new locations and a more supportive environment for drug and alcohol rehabilitation programmes, so as to enhance programme delivery and reduce barriers to programme entry.

5.11 That all hospital-based drug and alcohol rehabilitation programmes be structured so as to maximize federal contributions from sources such as the Vocational Rehabilitation for Disabled Persons Agreement.

7. PHARMACARE PROGRAMME

Since 1975, the provincial Pharmacare Programme has provided prescription drugs to seniors and special needs groups. Six separate drug programmes are administered by the Nova Scotia government. It is the fastest growing health care expenditure in the province. Total annual expenditures for Pharmacare over the past five years have been increasing at a higher rate than other provincial health programmes. **Nova Scotia's Pharmacare Programme is now the most expensive provincial drug benefit programme in the country on the basis of cost per insured person.**

The total cost of the Pharmacare Programme during its first fiscal year was approximately $7 Million. The estimated cost for 1989-90 is $76 Million. Costs have increased 125 per cent over the past five years, with an average annual rate of increase of 18.15 per cent since 1979, compared to an average inflation rate of 7.15 per cent. Annual statistics compiled by the Health Services and Insurance Commission reflect the excessive growth of this programme during the past decade. Nova Scotia's costs are 32 per cent above the national average, on the basis of cost per insured. The total expenditure on Pharmacare in the past year was more than the total amount spent on Medical Services Insurance payments ten years ago. There are limited cost control measures in place at the present to check this upward trend on Pharmacare expenditures.

Some calculations indicate that over $3 Million in savings could be realized each year with a lowest-available price drug product programme. The current incentive for generic drug substitution is only marginally effective in encouraging the use of generic substitutes for brand name drugs. The price paid by pharmacists, or actual acquisition cost of drugs can be higher than best open-market price, a problem which Ontario has dealt with successfully by negotiating with manufacturers directly.

Nova Scotia provides a Pharmacare Programme for about 15 per cent of its population - seniors and disabled on social assistance - for a cost similar to provinces such as Saskatchewan or Manitoba providing universal coverage under alternative programmes. Pharmacare coverage does not extend to several groups, such as most persons on social assistance, children suffering from chronic diseases, and Nova Scotians confronted with catastrophic drug costs. Social assistance recipients need uniform coverage for themselves and their families on a province-wide basis.

A serious concern associated with the drug benefits programme is the effects of inappropriate medication on the health of Nova Scotia's senior citizens. Many factors are contributing to the problem of over-medication: the lack of policy guidelines; gaps in continuing medical and nursing education; poor communication among families, patients, physicians, nursing staff and pharmacists; and a drug benefits plan which reimburses pharmacists the full prescription price. There are also those who "doctor-shop", consulting several physicians in order to obtain greater quantities of prescription drugs. This raises concerns about drug interactions as well as over-medication and prescription drug abuse. The Ministry of Health should develop and coordinate the programmes that address these issues.

The problem of inappropriate medication is not unique to Nova Scotia. In Ontario, over 20 per cent of seniors admitted to acute care hospitals are diagnosed as having prescription drug-related complications. Over-medication results in both health-related problems and increased expenditures. Thus, both quality of care delivered through the Pharmacare Programme and excessive costs are major concerns.

Several jurisdictions are addressing this issue using educational strategies. Manitoba, for example, has prepared a medication guide for seniors, the **Manitoba Personal Care Home Prescribing Guide: Drug Therapy for the Elderly**.[4] It contains information on prescription drugs, as well as other pertinent information needed to educate the elderly population about how drugs affect their quality of life. Prescription of non-listed drugs requires professional review. The Royal Commission acknowledges initiatives currently underway in Nova Scotia which are aimed at understanding and addressing the problem of over-medication of the senior population.

Reduced use of prescription drugs can be achieved through education of health care professionals and patients. Increased consumer awareness contributes to a greater sense of self-control over the determinants of health. A decrease in use by those presently insured, as well as the addition of other measures such as more vigorous cost-control mechanisms and a pharmacy/computer linked system, should allow for a reallocation of resources to extend coverage to those in need.

The pharmacy/computer linked system is an extensive telecommunications network connecting all pharmacies to a central computer system through a 24 hour on-line dedicated telephone link. Every publicly-insured prescription is recorded in a central data bank, all calculations for cost-sharing are compiled, and appropriate drug use monitored. One of the system's many attributes, in the long term, should be more rational drug use. It also safeguards against "doctor-shopping", and multiple filling of prescriptions.

Technology using plastic cards with embedded computer chips that have both memory and processing capabilities has also been suggested for managing prescription drug programmes. These cards, essentially pocket-size computer systems used for drug plan reimbursement and administration at the pharmacy level, would also allow pharmacists to routinely access and update a patient's medication record. They would also permit better management, serving as a check on prescribing patterns as well as monitoring drug consumption.

These technologies represent opportunities for improving both quality of care, utilization, and cost management of the Pharmacare Programme.

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[4] Manitoba Health Services Commission, **Manitoba Personal Care Home Prescribing Guide: Drug Therapy for the Elderly** (Winnipeg: 1986).

The Royal Commission therefore **RECOMMENDS:**

5.12 That drug utilization reviews be expanded in order to reduce over-medication and that better information and drug education be provided to physicians.

5.13 That the Ministry of Health eliminate the actual acquisition cost method of payment, and mandate a lowest-available price-product system for the Pharmacare Programme.

5.14 That a public information and consumer awareness campaign be implemented to increase knowledge regarding prescription and over-the-counter drugs, particularly with respect to their side-effects, interactions, and reactions, as well as substitutes and cost.

5.15 That the Ministry of Health develop a patient card, computer-linked system to monitor drug utilization, cost, and increase efficiency of the claims processing and accounting functions.

5.16 That the Pharmacare Programme coverage be uniformly extended to Nova Scotians on social assistance and that criteria be developed for further expansion of the programme to Nova Scotians confronted with "catastrophic" drug costs.

8. AMBULANCE SERVICES

Ambulance services are provided by the members of the Ambulance Operators Association of Nova Scotia and by the Victoria General Hospital. Pressure has been building from the public and health care providers for reform of the service in terms of standards, rationalization, and costs. Recommendations of earlier studies on ambulance service have been partly implemented, but no overall rationalization of services within the system has occurred.

The cost of providing ambulance service has risen steadily, in keeping with increased levels of service. These costs, however, do not necessarily reflect the quality of the service provided. Funding has been stabilized through a formula which adjusts subsidy payments to call volumes. Further improvements to ambulance service will require new outlays or the reallocation of present funds. The Royal Commission's proposals are based on reallocation of resources between emergency care services and non-emergency transportation services. The Royal Commission believes this can lead to an improved quality of ambulance service for all Nova Scotians.

Ambulance service "calls" are presently categorized by the Ambulance Subsidy Programme as **hospital to hospital** or **emergency**. Nonetheless, ambulance service in Nova Scotia is viewed by programme administrators largely as a transportation service that shuttles people between hospitals or between hospital and nursing home. Management of the system on a provincial basis is complicated by an inability to determine the actual number of genuine emergency calls as compared with those non-urgent calls which could be pre-scheduled. Indeed, any call involving transfer from a hospital to another type of facility such as a nursing home is classed as an "emergency" by the Ambulance Subsidy Programme.

There is a need to coordinate long distance transportation of patients at the provincial level and to increase the efficiency of the overall system. Under current contractual arrangements, an assigned operator is responsible for a defined geographic area and for transporting patients of that area to and from facilities in other communities or regions. Frequently, ambulances transport patients over long distances, travelling empty in one direction. This inefficient practice could be improved by provincial coordination of transfers using ambulances to transport patients to any point along the empty portion of a trip. For example, an otherwise empty ambulance returning from Halifax to Sydney could take a patient to Port Hawkesbury. Guidelines on the utilization of ambulances and non-emergency transport services should be developed to maximize the use of non-emergency transportation systems while maintaining an appropriate emergency response capacity.

The patient shuttle operated by the Victoria General Hospital is a service which is of value to the community; it is also cost-effective. The ambulance service provided by the hospital is noteworthy for its high standard of care. The Royal Commission believes that this ambulance service provides both a valuable example and resource to other services operating in the province. Due to the nature of its funding, it is currently not a recipient under the Ambulance Subsidy Programme, and is not included in its reports.

Comprehensive management of ambulance services within a region will require that all services provide management information data to the Regional Health Authorities and the provincial transfer coordination office. Under the regionalization scheme proposed in this Report, the Regional Health Authorities have the responsibility of contracting for the provision of cost-effective patient transportation and emergency care ambulance services. Each Regional Health Authority will have the options of contracting with existing private operators, setting up new publicly-managed services, using volunteer services, or relying upon a combination of these.

The Royal Commission believes that the existing Ambulance Advisory Board should be dissolved. The Provincial Health Council should advise on:

- training;
- equipment standards;
- certification;
- documentation; and
- medical review.

This advice should be drawn from a broad base, including representatives from physician and nurse specialists in emergency services, ambulance attendants, and service operators. It should also develop guidelines on the use of ambulance and alternate services for non-emergency patient transport, and the role of special attendants such as nurses and respiratory technicians.

Guidelines for appropriate utilization of ambulances and patient shuttle services may assist in reducing costs by making maximum use of alternative services. Quality of care and accountability should be addressed by making all standards public in the form of regulations. **The Royal Commission stresses the importance of achieving greater value for money with respect to ambulance service in the province.**

In view of the above, the Royal Commission **RECOMMENDS:**

5.17 That the Provincial Health Council provide advice on emergency medical services, including operational standards for ambulances, training and certification of attendants, guidelines for use of emergency and non-emergency patient transfer, and equipment.

5.18 That standardized programmes of training for Emergency Medical Attendants which meet the accreditation standards of the Canadian Medical Association be developed immediately and phased-in to apply to existing and future ambulance attendants within two years.

5.19 That greater efficiencies and better management of utilization be achieved by eliminating duplicate areas of service by private operators; by provincially coordinating transfers between institutions; and by establishing a hospital "shuttle" system for transferring patients in urban areas.

5.20 That an appropriate information system be developed and implemented to improve the ability to manage ambulance services.

5.21 That a comprehensive review and evaluation of ambulance services be conducted in two years by the Health Council, so as to examine progress made, and to recommend possible future changes to the delivery system.

9. HEALTH CARE TECHNOLOGY

The use of new health care technologies is a starting point for the debate on the kind of health care system desired by, and most appropriate to, the needs of Nova Scotians.

Scientific and technological achievements have radically transformed modern health care systems. The introduction of expensive new technologies raises the demand for scarce dollars and forces policy makers into selecting priorities. The situation is exacerbated by health care professionals and facilities who compete for prestigious equipment, and by consumers who have great faith that the more sophisticated or complex the machinery, the greater its effectiveness. Availability and feasibility of new technology must not be the sole criteria for its application.

In Chapter III, the Royal Commission proposed that a standing committee of the Health Council should be tasked with leading the discussion on the social value and cost-benefits of health care technology within an ethical framework of health services.

The use of health technology must be based on defined population needs. Health technology assessment must examine the efficacy and safety of a technology, its appropriate clinical use, relative cost-benefit or risk-benefit, as well as ethical and social implications. Such assessments promote rationalization in health care planning, based on scientific and economic evaluations which incorporate social and ethical considerations. Used to control unevaluated technologies or to identify misuse, technology assessment can contribute to the improvement of quality of care.

While public discussion on technology assessment tends to focus on new or high-price technologies that benefit relatively few patients, it is equally important to consider less costly, high volume items that may not benefit the patients who are exposed to them. Results of technology evaluation should be incorporated into health policy areas such as hospital funding and regionalization, human resources planning and education, physician utilization reviews, and physician reimbursement mechanisms. The advantages of new technology and its consequences on management, operations, and servicing must be ascertained and taken into consideration.

At a practical level, distinctions must be made between low-cost, high-volume and high-cost, low-volume technologies. The introduction of either must meet the criteria of population-based regional planning. The imbalance in resources for high technology services that benefit few, contrasted with primary care, prevention and promotion which can benefit many, must be addressed. It is within this ethical framework that the Health Council can promote debate about the nature of health services appropriate for Nova Scotians.

It is the Royal Commission's belief that a managed approach to the acquisition and use of technology is imperative, and must take place within a cogent policy framework. Technology must be introduced in the context of appropriate resource allocation, and evaluated with respect to health results obtained. In addition to the development of an inter-provincial coordinated process for technology assessment, some practical limitations on the use of technology should be immediately implemented.

The Royal Commission therefore **RECOMMENDS:**

5.22 That a standing committee of the Health Council collect, analyze, and disseminate information on the appropriate use and types of health technology to be available as insured services in the province. Further, that the Ministry of Health rationalize the use of technology based on these evaluations.

5.23 That the Ministry of Health not provide payment to hospitals or physicians for services using unapproved technology.

5.24 That clinical guidelines and protocols for the use of specific health technologies be developed by the Health Council.

Implementation Schedule — ChapterV

		1990-91	1991-93	1993-96
5.01	■ Allocate non-transferable resources to develop health promotion and community-based programmes.	→	→	→
5.02	■ Expand the Coordinated Home Care Programme.	→	→	→
5.03	■ Provide for appropriate pastoral care in regional health services budgets.	→	→	→
5.04	■ Review rehabilitation services.	→	→	
5.05	■ Recognize pallitive care as an integral component of health services provided by the Ministry of Health.	→	→	→
5.06	■ Expand the range of mental health services provided by the Ministry of Health.	→	→	→
5.07	■ Change the name of the Psychiatric Mental Health Division of the Ministry of Health to Mental Health Division.	→		
5.08	■ Evaluate psychiatric services provided by hospitals and mental health centres.	→	→	
5.09	■ Recruit American-trained psychiatrists. Respond immediately to the shortage in child psychology.	→	→	→
5.10	■ Allocate resources for improved facilities, new locations, and a more supportive environment for drug and alcohol rehabilitation programmes.	→	→	→
5.11	■ Maximize federal contributions to drug and alcohol rehabilitation programmes.	→	→	→
5.12	■ Expand drug utilization reviews.	→	→	→
5.13	■ Mandate a lowest-available price-product system for the Pharmacare programme.	→		
5.14	■ Increase knowledge about drugs through a public awareness campaign.	→	→	→

		1990-91	1991-93	1993-96
5.15	■ Develop a patient card computer-linked system to monitor drug utilization, cost, and increase efficiency of claims processing and accounting.	→	→	
5.16	■ Extend Pharmacare to social assistance recipients. Develop criteria to expand programme to citizens with "catastrophic" drug costs.	→	→	
5.17	■ Develop policy and guidelines for emergency medical services.	→	→	→
5.18	■ Develop standardized training programmes for Emergency Medical Attendants.	→	→	
5.19	■ Eliminate duplicate areas of service by ambulance operators. Coordinate transfers between institutions.	→		
5.20	■ Develop information systems to improve management of ambulance systems.	→		
5.21	■ Review ambulance services in 2 years to examine progress made, and to recommend further changes to the ambulance system.	→	→	
5.22	■ Collect, analyze and disseminate information on health technology.	→	→	→
5.23	■ Deny payment to hospitals or physicians using unapproved technology.	→	→	→
5.24	■ Develop guidelines for use of specific health technologies.	→	→	→

CHAPTER VI
FINANCING THE HEALTH CARE SYSTEM

INTRODUCTION

This Chapter examines the financing of the province's health care system, both in terms of level of funding and rate of expenditure growth. The analysis then focuses on the financial management of the health sector, particularly institutions, and proposes measures to government for improved controls on health spending. A new regional funding structure, allowing for both greater equity and efficiency in financing the system, is proposed.

Expenditures on social programmes express the ideological priorities which a society chooses to adopt. **The Royal Commission reiterates its endorsement of the principle of public financing of health care services.** Health spending must be approached as a key socio-economic investment. In determining the appropriate level of public outlays on health, long-term societal benefits such as the well-being and productivity of the population must be considered. These long-term dividends transcend the immediacy of the results obtained through the health care delivery system. The Royal Commission also maintains that the current levels of public expenditures are indeed adequate for provision of quality health care to Nova Scotians, in keeping with the principles of the Canada Health Act. This is stated, however, while recognizing that the health system is heavily dominated by an acute care orientation, and that serious gaps exist in the comprehensiveness of health care services. As currently designed, the health care delivery system and funding structure allow for little flexibility, innovation, or responsiveness to changing patterns of demand in the population.

The Provincial Health Council and Regional Health Authorities will provide the locus for the participatory debate and resolution of questions of health and social priorities, and their consequent financial implications, so that the values and priorities of Nova Scotians may be fully recognized. Moreover, it is essential for government, in keeping with the proposed Comprehensive Health Policy, to recognize **health care as one determinant of health**. Many of our policies have been predicated on the premise that the health system is synonymous with its delivery and insurance systems. A broad approach to the determinants of health must now guide the shaping of health policy and expenditure patterns.

Furthermore, it is imperative that the conflicting policy objectives which affect health be fully understood and clarified. As an example, use of the health system as an instrument of the broader social objectives of income redistribution and regional economic development often hinders the attainment of specific health objectives. Likewise, agricultural and environmental policies frequently work at cross purposes with health objectives. In view of the pre-eminent value attributed to health by society, and of the magnitude of expenditures on the health system, it has become a pressing matter for government to re-examine the impact of all its policies on the health of its population, and to articulate a comprehensive strategy for health.

Appropriate levels of health care spending cannot be easily identified or reduced to simple financial formulas since there are no accepted standards against which to compare. There does not seem to be any direct relationship between high levels of spending and health status. For example, the United States has one of the highest percentages of gross domestic product spending on health care among countries belonging to the Organization for Economic Co-operation and Development, and one of the lowest standings with respect to results indicators. Adequate levels of financing of the health care system, or appropriate rates of growth, cannot be discussed without first establishing policy objectives with respect to **results.**

While maintaining that the current levels of financing are adequate to providing quality health care to the Province, the Royal Commission contends that the capital and human resources allocated to health care can be more efficiently utilized so as to realize better value for the money spent. Research suggests that current patterns of health care delivery and utilization in Canada are frequently ineffective and inefficient. Furthermore, many routine health care and medical practices remain disconcertingly unevaluated. **The Royal Commission maintains that a focus on results, together with the reallocation of resources and structural realignments discussed throughout this Report, should lead to enhanced service quality and a better return on health care dollars.**

The Economic Reality

As elaborated in Chapter II, the health care system must be analyzed in the context of the global economic activity of the province. The degree of wealth generated by the productive sector of the economy determines the level and sustainability of spending on health and social services. Paradoxically, however, a high level of health spending reduces public resources available to promote expansion and growth of productive economic activity, such as regional development and industrial promotion, and thus weakens the economy's capacity to support social services spending. **Health care expenditures must be planned and managed as an intrinsic component of an integrated economic strategy, as they dynamically affect and are affected by other sectors of the economy.** The level of Nova Scotia's health care spending must be thus considered in the context of total social and economic activity of the province.

Health care is currently the single largest provincial expenditure, consuming $1.1 Billion ($1,100,000,000) or 26.5 per cent of the provincial budget. In addition, the province manages capital assets with an estimated replacement value of approximately $4 Billion. The provincial debt is in the range of $4 Billion, with debt servicing charges projected at $586 Million or 16.6 per cent of provincial government expenditures.[1] It is estimated that if current trends continue unchecked, health care costs will reach $3 Billion by 2001, or 36 per cent of provincial expenditures, as Figure 6.1 demonstrates.[2]

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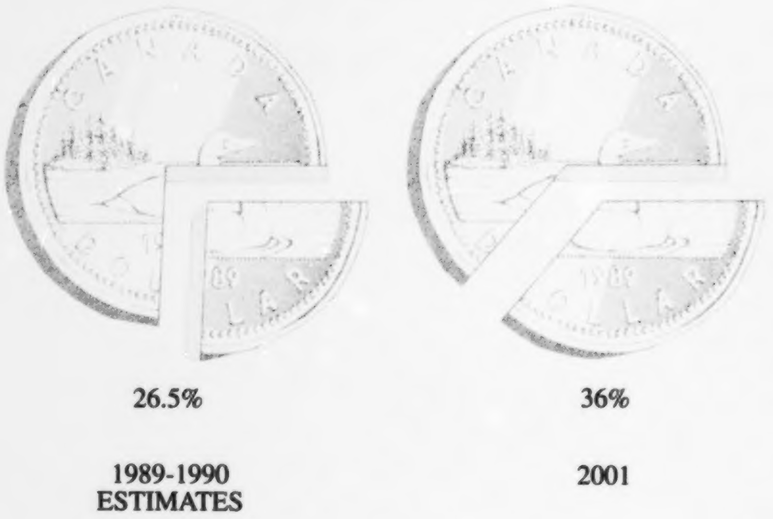
[1] **Estimates of the Government of Nova Scotia for the Fiscal Year 1989-90.**

Figure 6.1

Projected Health Care Costs



Source: STATISTICS CANADA (actual)
CANMAC ECONOMICS (projected)

This expenditure pattern is forecast to occur in the face of undetermined economic performance to the end of the century. The implication of this is a **reduction in the ability of the province to pay for health care services**, if all other factors are held constant. It is clear that difficult political choices need to be made with respect to levels of public spending on health care, and that steps must immediately be taken to optimize returns from these expenditures.

With the current and projected financial situation in mind, it is worth repeating here that Nova Scotia's rate of supply and utilization of health care services is very high in comparison with other Canadian provinces and continues to increase. At about 11 per cent of provincial gross domestic product, Nova Scotia's annual expenditure on health services is higher than the Canadian average. Per capita spending for physicians' services has grown faster than most provinces, due to rapid increases in fee levels, the number of physicians, and the number of services provided by each physician. Hospital construction is not always undertaken in response to demonstrated health needs of communities. The Pharmacare Programme is the fastest growing health care expenditure, and has increased at an average rate of approximately 20 per cent annually during the past ten years. Health care technology has far-reaching cost implications for the system, yet adequate information to assess the appropriateness and efficacy of technological hardware and procedures is surprisingly wanting.

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[2] Canmac Economics Ltd., **Economic Forecast**.

In spite of this level of spending, based on our current health status indicators, both in Nova Scotia and in the country at large, there is an obvious requirement to tailor health care programmes to demonstrated needs, streamline health services management, and develop more efficient health care spending policies.

At the same time as introducing administrative and process reform, it is critical that the Province of Nova Scotia financially manage health care expenditures by establishing **targeted levels of economic spending.** The financial situation of the province, together with the increasing share of expenditures that the health sector consumes, necessitates the introduction of tighter fiscal controls on, and evaluation of, the system.

1. FINANCIAL MANAGEMENT

Federal-Provincial Funding

Amendments to the Established Programme Financing Act of 1977 have increased fiscal pressures on the provinces, and have concentrated the burden of health expenditures at the provincial level. The Established Programme Financing Act replaced the 50 per cent cost-sharing formula which previously determined the federal government's financial contribution to provincial health and post-secondary expenditures. This cost-sharing formula was originally intended to address regional disparity in health and social spending. For health programmes, Established Programme Financing is a conditional block funding arrangement dependent on the provinces' adhering to the principles of universality, comprehensiveness, accessibility, portability and public administration. However, the block funding grant is tied to growth in the national economy rather than to growth in health care costs, in spite of the fact that the latter have increased more rapidly.

Established Programme Financing transfers have not kept pace with the increase in health care costs. This has resulted in the provinces having to meet the conditions of the agreement under additional fiscal pressure on their budgets in light of rising health care costs. **Federal contributions as a percentage of provincial expenditure in Nova Scotia have fallen approximately ten percentage points since 1979-80. Growth in health expenditures in Nova Scotia was 285 per cent over the same period.**[3]

Under the present formula, the federal government's financial contributions will continue to represent a declining proportion of total provincial health spending. It is becoming increasingly difficult to reconcile the tension created by the federal government in requiring compliance with the principles of the Canada Health Act, while not providing the provinces with the necessary resources to meet these objectives. Under the present formula, the federal government's financial contributions will continue to represent a declining proportion of total provincial health spending. Nova Scotia's revenue sources are not expected to increase significantly given the economic and demographic projections cited in Chapter II. The increasing proportion of elderly will discount the productive population's ability and financial capacity to support its social programmes. Resources available for health care spending will need to be judiciously managed in view of forecast economic activity in the province.

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[3] Institute for Health Care Facilities of the Future, **Fiscal Federalism From the Perspective of Nova Scotia**.

In view of the above, it is **RECOMMENDED:**

6.01 That the Government of Nova Scotia join with the other provinces and urge the federal government to re-examine the Established Programme Financing Act so as to achieve a clearer policy and financing framework. That the Government of Nova Scotia, together with the other provinces, urge the federal government to reassess the impact of its decreasing share of provincial health care expenditures and review the consequent implications for maintaining the integrity of the Canada Health Act.

6.02 While the future of the Established Programme Financing Act is being reassessed, that the Government of Nova Scotia, together with the other provinces, request that the federal government provide technical and advisory resources in areas of inter-provincial scope, such as physician human resources planning and technology assessment, to allow for coordination on issues of national importance.

Provincial Management

Previous sections have documented the need to maximize the results obtained from the resources Nova Scotia currently expends on health care through improved management, reallocation of human and capital resources, attention to utilization of services, improved information systems, and reorganization of modes of delivery.

Financial management of the provincial economy must be carried out on a broad basis, recognizing health as an integral and dynamic component of the economy, interacting with other sectors such as the environment, education, agriculture and industry.

As part of a broad planning strategy and to contain costs, the province should set objectives and targets with respect to health care spending, for all programmes, in the short, medium, and long term. Furthermore, the province has a responsibility to maximize revenue from all sources — including cost recovery, cost-sharing and revenue generation — to reduce some of the fiscal pressures resulting from health spending. Funding structures and financial incentives should be approached as strategic management measures designed to obtain desired health outcomes. Planning, management and financial accountability must be improved to allow these objectives to be met.

To set this process underway, it is **RECOMMENDED**:

6.03 That effective planning, financial management, and accountability be strengthened in view of projected demands on the health care system and of the provincial economic climate. That targeted levels of health spending be established globally and for individual programmes within the health budget.

6.04 That government approach expenditures on health care strategically, and weigh health spending in relation to other social and economic programmes which have an impact on health status.

6.05 That fee negotiations with physicians be coordinated with the provincial government financial planning process. That officials from Management Board and the Department of Finance form part of the government's negotiating team.

6.06 That the Government of Nova Scotia establish a dedicated tax on alcohol and tobacco with revenues designated specifically to drug and alcohol rehabilitation programmes.

6.07 That the Ministry of Health recover a more equitable share of costs for tertiary care services from the other Maritime provinces.

2. A MORE EQUITABLE FUNDING STRUCTURE

The current system of payment for health care services is open-ended. Patients receive services free of direct charge to themselves from private practice physicians who are paid on a fee-for-service basis, and from hospitals, owned by communities and other not-for-profit organizations, managed by independent boards of trustees and financed through global budgets. Physicians and hospitals are reimbursed by the provincial government at rates negotiated annually. Capital expenditures, including technology acquisitions, are negotiated between institutions and the provincial government, in a process apart from the annual budget negotiations.

In part, as a result of these funding mechanisms, increases in health spending are exceeding the ability of the province to pay for these services. In addition to these escalating costs, the Royal Commission has noted that **the provision of health care services is not evenly and equitably distributed across the province**.

As elaborated earlier in this Report, Regional Health Authorities will be responsible for the management and operations of all health services within their respective areas. In keeping with its call for regional administration, the Royal Commission proposes a **regionally-based funding structure**. Under the management of the Regional Health Authorities, this funding structure would consolidate and integrate the various payment mechanisms now in existence. Under this arrangement, Regional Health Authorities would be responsible for the administration of expenditures for **all health care programmes,** including physicians' services, institutional care, Pharmacare, ambulance services and community-based programmes.

On the basis of the **Regional Services Plan**, which will specify the range, volume and mix of health services to be provided for a particular region, the Regional Health Authorities would receive a given funding envelope. Required services for their population as determined by the Regional Services Plan would be contracted with various health care groups. Regions will be responsible for purchasing the best services available, that is to say, **the most cost-effective in terms of health outcomes**, within that budget. In this manner, the Regional Health Authorities would negotiate with institutions, physicians, non-government agencies and public health units for the provision of specific health services. Regional Health Authorities will be held accountable for improving the health status of their community and for obtaining value for money from the resources they consume. For example, if better results can be anticipated by providing more preventive care, rather than more inpatient hospital care, then the Regional Health Authority must be able to exercise that option. This new arrangement would constitute a shift in administration in that persons responsible for health care would now deal with Regional Health Authorities, rather than directly with the provincial government, thereby establishing the management of health services closer to users of these services.

Regional funding would be allocated on a **weighted capitation basis** and set prospectively, according to the size and profile of the regional population. Analysis of the region would include population, demography, epidemiological profile, and current levels of servicing. **This capitation formula will allow for a more equitable distribution of health care resources throughout the province and establish a sounder base for the provision of health services.** Regions currently experiencing over-servicing of health services would find their resources readjusted in favour of disadvantaged areas. In accordance with the capitation formula, each Regional Health Authority would receive a budget to administer its health services plan and contract with its physicians, institutions, and health care agencies. Regional autonomy would be promoted in that each region would be able to determine how best to expend funds to meet the health needs of its population. The development of special programmes and tertiary care, however, would remain with the provincial government, as would negotiation with system-wide health personnel.

Recognizing the importance of information and evaluation for good management, the Ministry of Health must fund information systems to provide managers with comparative information and analysis on operations. This information must form the basis for planning by government and the Regional Health Authorities.

To allow for effective fiscal management, planning must extend beyond the annual budgetary cycle. Prospective funding, allocated over three year periods, would allow for a focus on specific objectives and actual outcomes.

In view of the above, it is **RECOMMENDED:**

6.08 That the Government of Nova Scotia decentralize the funding structure for health care expenditures to the Regional Health Authorities.

6.09 That the Ministry of Health establish appropriate information and financial management systems to allow for a population-based regional funding system.

6.10 That a three-year budget cycle be introduced into the health care financial management system to enable effective long-term planning of health programmes.

3. INSTITUTIONS

Major issues brought to the attention of the Royal Commission in the debate about the efficient and effective use of health facilities in Nova Scotia include the requirement for less reliance on inpatient care, the need for population-based planning, improved management information systems, stronger financial management, and an extended budgetary cycle. Government involvement in the day-to-day operation of hospitals was also identified as an inappropriate role in the efficient management of institutions.

A general perception that health care is synonymous with hospital care still prevails. In many regions, the hospital has been the traditional focus of health care. History suggests that a given population will use as many hospital beds as are made available, and that once opened, hospitals are rarely closed.

An over-reliance on inpatient hospital care was noted as a cause of much concern as early as 1970.[4] Much of the problem of escalating hospital costs stems from the excess capacity of these facilities. Figures 6.2 through 6.5 show that there is a strong association between the distribution of beds and bed utilization rates.

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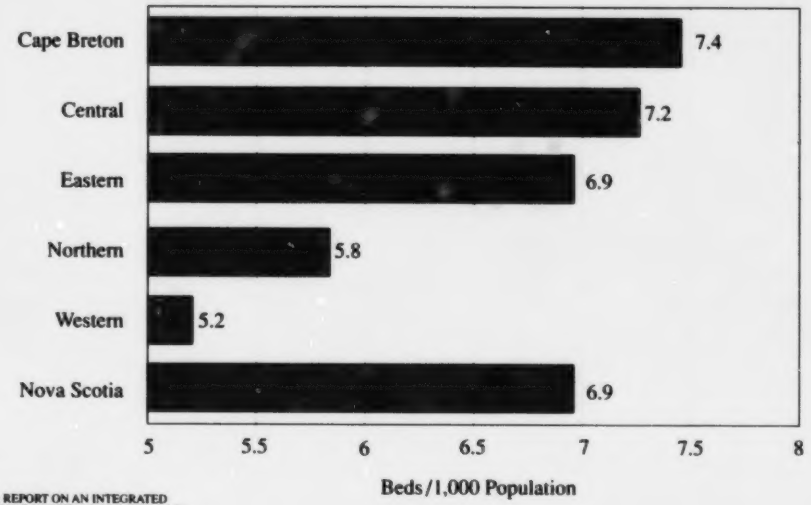
[4] Robert G. Evans and Hugh D. Walker, "Economic Issues in the Provision of Health Services" in L.H. Officer and L.B. Smith (eds.), **Canadian Economic Problems and Policies**. (Toronto: McGraw-Hill, 1970).

Figure 6.2

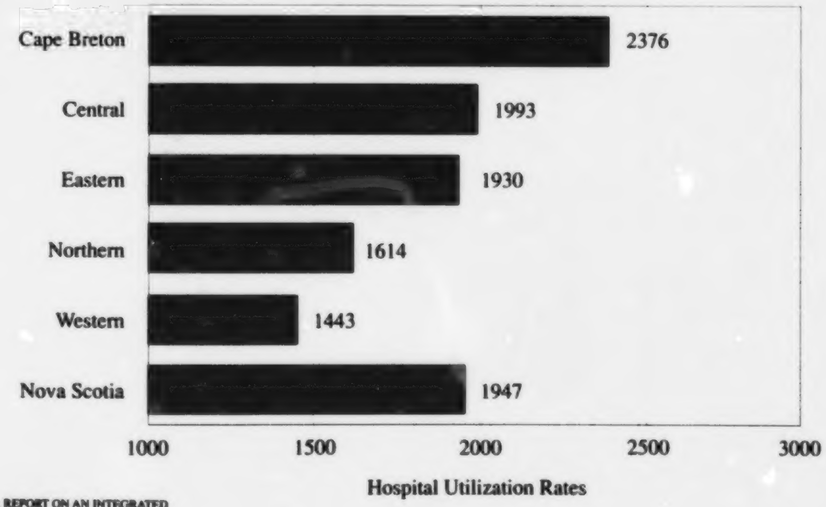
Beds Per 1,000 Population by Region 1970



Source: REPORT ON AN INTEGRATED SYSTEM OF HOSPITAL FACILITIES AND RELATED SERVICES, NOVA SCOTIA, 1971

Figure 6.3

Patient Days Per 1,000 Population by Region 1970

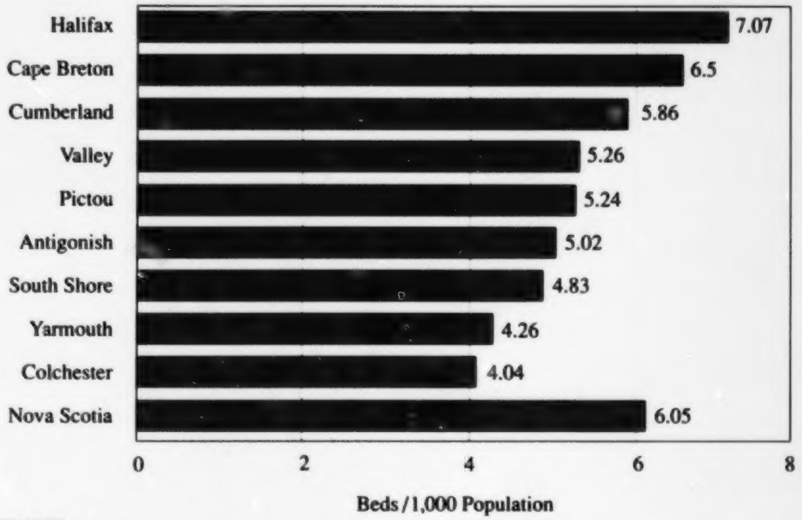


Source: REPORT ON AN INTEGRATED SYSTEM OF HOSPITAL FACILITIES AND RELATED SERVICES

There was a perfect correlation between number of beds and utilization rates in 1971. Except for the Halifax and Valley regions, Figures 6.4 and 6.5 again depict a near perfect correlation between number of beds and utilization rates in 1989.

Figure 6.4

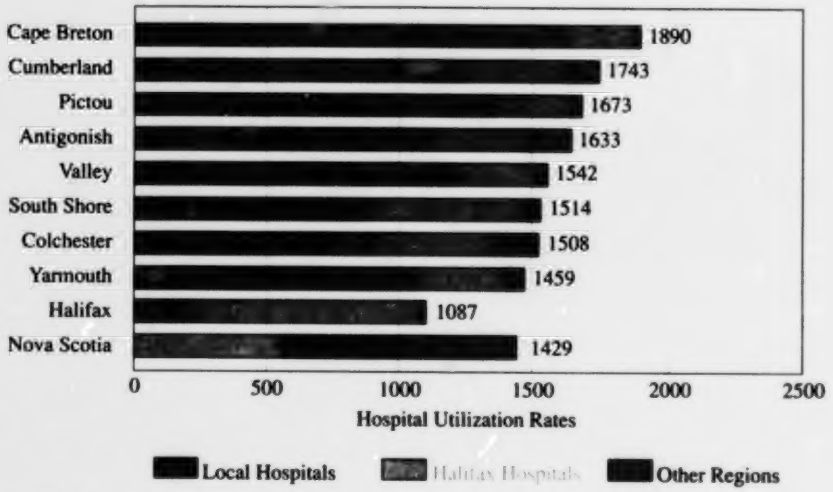
Beds Per 1,000 Population by Region
1988-89



Source: NOVA SCOTIA
DEPARTMENT OF HEALTH & FITNESS

Figure 6.5

Patient Days Per 1,000 Population by Region 1988-89



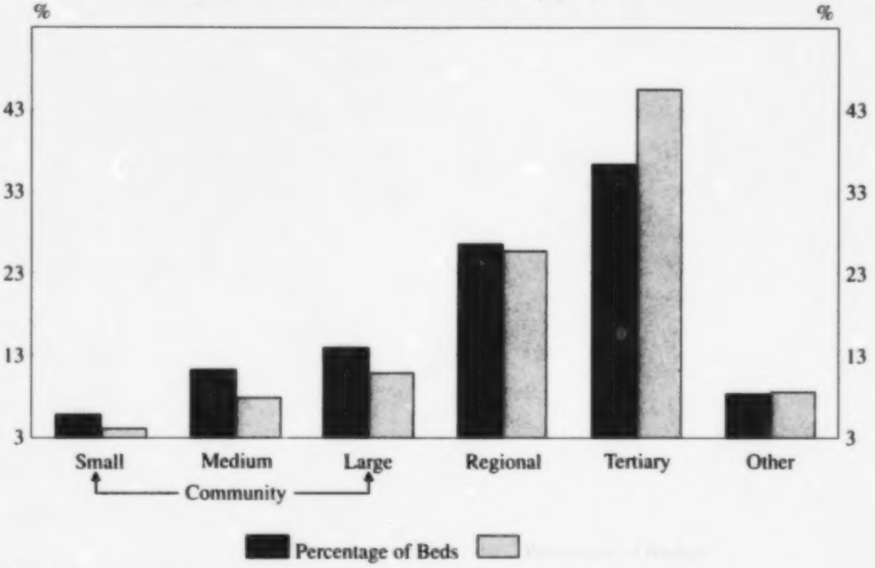
Source: NOVA SCOTIA
DEPARTMENT OF HEALTH & FITNESS

In 1972 the Nova Scotia Council of Health recommended 4.5 acute care beds per 1,000 population until better home and ambulatory care was available. In 1984 the Select Committee on Health noted that excess capacity and maldistribution had not changed much since the publication of the Council's report. While several other provinces show a trend in declining numbers of hospital beds in favour of other types of institutional beds, there is less evidence of this trend in Nova Scotia.

The relationship between beds and hospital budgets, by type of hospital, suggests that several community hospitals have excess capacity (Figure 6.6).

Figure 6.6

Hospitals Grouped By Type & Size



Source: NOVA SCOTIA
DEPARTMENT OF HEALTH & FITNESS

The 27 small-to-medium size community hospitals account for almost 17 per cent of all beds and approximately 12 per cent of the budget. The six large community hospitals — Dartmouth, Glace Bay Community and Glace Bay General, Hants, Northside and Soldiers' — account for 13.6 per cent of all beds and 10.6 per cent of the budget. The regional hospitals house 26 per cent of all beds and spend 25 per cent of the budget. The tertiary hospitals have 35 per cent of the beds and 44 per cent of the budget.

The Royal Commission contends that hospitals must be used in ways that are more flexible and better suited to the needs of Nova Scotians. The health care of the future must be delivered in a wider variety of settings and in ways that redress the current imbalance between acute care and other services such as mental health, health promotion and rehabilitation services. Upon determination of their regional needs, the Regional Health Authorities will review their institutional requirements and make the necessary adjustments.

In many areas of the province, the changes needed to establish the community as the primary setting for health care can be accomplished by redefining small community hospitals as community health centres. These centres would emphasize ambulatory care and a multi-disciplinary approach to community health, drug rehabilitation, and mental health services, among others, within the framework of the Regional Health Authority.

Funding administration is an integral financial mechanism in the management of health care facilities. Hospitals in Nova Scotia are funded on an annual global basis. Hospital reimbursement systems should encourage a shift to community-based care, as done in other provinces. Given the evolving nature of the health care system, reimbursement mechanisms and organizational structures must be realigned to promote greater coordination of institutional and community-based services, and provide incentives to treat patients in more appropriate, less costly settings.

The present approach to hospital funding, widely used in Canada, relies on forecast patient volumes rather than on actual activity. Hospitals are funded with little reference to the viability of programmes or the severity of illness. The current system does not provide incentives for cost-effective management, such as reduction of beds, reallocation of resources to outpatient care, or treatment of patients through less costly alternative programmes. The current policy on surplus retention does not properly reward efficiency or productivity. Furthermore, the lack of continuity from year to year in the current budgeting system prevents hospitals from engaging in effective financial, human or capital planning on a medium to long-term range.

The increasing limits on financial resources will emphasize the urgent need for Regional Health Authorities to manage their health care institutions, and for facilities to monitor their operations more effectively. Consequently, **the Royal Commission proposes the development of a funding system designed to promote high quality care in the most cost-effective setting by providing incentives to institutions for optimal management**. Furthermore, in keeping with its guiding principles, the Royal Commission suggests that a hospital funding formula which is much more closely focused on productivity or **outputs** must be developed.

The new funding formula for facilities should have the following features:

- Provide incentives consistent with the Provincial Health Strategy and Regional Services Plan.
- Be based on separate outputs for inpatient, outpatient and long-term care.
- Recognize mix and severity of illness.
- Allow Regional Health Authorities to manage service volumes within approved allocations.
- Be fair, equitable, and consistently applied.
- Be flexible with respect to the introduction of new technology or programmes.

- Be stable and predictable over periods of time longer than one year (preferably three years).
- Promote accountability.
- Involve clinical staff in the allocation of resources and management of programmes.

The Regional Health Authorities will have the challenge of reassessing and redefining the use of facilities within their respective regions as part of the Regional Services Plan, which will reflect regionally-defined needs and priorities. These planning documents will form the basis for the Regional Health Authorities' contracts with hospitals and other health care agencies.

Hospital services will be funded on a population-based, prospectively-calculated formula. To ensure that the funding system does not result in inappropriate utilization, each institution will execute a contract with its Regional Health Authority providing for minimum and maximum volumes for inpatient stays, day surgery visits, outpatient visits, and long-term care, where appropriate. Funding for both contracted hospital services and remuneration of hospital-based medical services will be prospectively calculated at the middle range for these variable items. To avoid a volume-driven system, neither hospitals nor physicians should be guaranteed reimbursement when maximum volumes are exceeded. Any compensation for these additional services would be provided at a reduced rate within the terms of the contract.

Provincial Ownership of Hospitals

The Royal Commission maintains that all health agencies should be closely identified with the communities they serve. The trend towards provincial ownership of hospitals in Nova Scotia can interfere with this close identification because the community lacks a say in appointments to these boards, and hence, in the governance of the institution. Accordingly, the Royal Commission believes that all provincially-owned hospitals should have nominating committees and procedures similar to those found in other hospitals.

Not all government-owned hospitals are alike. The Victoria General and Nova Scotia Hospitals are by statute treated as government agencies. Five government departments are involved in the operation of these institutions. This unique and awkward relationship with government seriously impedes the ability of these hospitals to function efficiently. The Royal Commission strongly endorses the recent announcement that the Victoria General Hospital will restructure to operate like any other hospital. The Royal Commission suggests, however, that this process could be accelerated. It also believes that the status of the Nova Scotia Hospital should be regularized in a similar fashion.

Capital Construction

Decisions about capital construction must be made with care as they have far-reaching and costly implications. Hospital construction programmes have often been affected by pressures of special interest groups, as opposed to the real health needs of the population. Hence, it is crucial that capital planning be conducted within the framework of the Provincial Health Strategy and Regional Services Plans. These plans must take into account changing morbidity patterns and the requirement for facilities which meet the health needs of the elderly, especially with respect to long-term chronic care.

The Royal Commission, therefore, **RECOMMENDS:**

6.11 That each Regional Health Authority develop its Regional Services Plan, which will define the role and function of all institutions within its region.

6.12 That the Ministry of Health develop incentives to promote alternative settings and payment for primary care services provided by physicians and other front-line health professionals, such as Community Health Centres and Health Service Organizations.

6.13 That the Regional Health Authorities consider the expansion of the roles of community hospitals as primary care facilities.

6.14 That a task force of the Provincial Health Council, composed of representatives from the Ministry of Health, the Nova Scotia Association of Hospital Organizations, and each Regional Health Authority, be established to recommend revisions to the hospital funding system, taking into account the principles outlined above.

6.15 That the Ministry of Health participate in inter-provincial studies to develop a model for funding hospitals on an output basis.

6.16 That the establishment of the Victoria General Hospital as a distinct, independent organization, subject to the same rules and regulations as other hospitals in the province, be accelerated and that the Nova Scotia Hospital be similarly established.

6.17 That all government-owned hospitals employ nominating procedures for the appointment of directors that are similar to and consistent with the procedures in use at the other hospitals in the province.

6.18 That the Hospital Constuction Programme and Committee be disbanded and that a freeze be established on all capital construction, major capital equipment acquisitions, and new programmes until the Provincial Health Strategy and Regional Services Plans have been established.

Teaching Hospitals

Teaching hospitals have long been thought to incur higher costs than non-teaching hospitals. The Royal Commission examined the extent of indirect teaching costs in teaching hospitals after adjusting for severity of illness and the size and geographic location of these hospitals.[5] These indirect teaching costs represent additional costs incurred by a hospital because the presence of interns and residents puts service-related demands on the hospital's budget.

Due to the number of variables involved, statistical analysis was used to estimate two cost measures: cost per day and cost per stay. The cost per day analysis estimated that an increase of one resident or intern per 100 beds would increase costs by $14.84 per day per bed. The cost per stay analysis estimated that the same increase of residents or interns results in $78.43 increase per stay, all other factors being equal.

A hospital's occupancy rate and the severity of illness of its patients were identified as other factors that contributed to difference in costs between teaching and non-teaching hospitals in Nova Scotia. While teaching hospitals treat a more severely ill group of patients, their higher occupancy rate allows them to take advantage of economies of scale.

A study recently conducted for the Association of Canadian Teaching Hospitals found that its member institutions experience higher costs. Both studies demonstrated, that as in the rest of Canada, Nova Scotia's teaching hospitals do experience indirect teaching costs. Although significant in actual dollars, these costs are a small component of the total costs of these hospitals. The Royal Commission maintains that these costs should be recognised as legitimate service costs, not as subsidies for teaching.

While most of the teaching of health professionals takes place in the Halifax area, attention needs to be directed at broadening the experiences of students in the health professions, placing greater emphasis on primary care, as well as encouraging the recruitment of these individuals to regional centres. The Royal Commission has concluded that too much emphasis is placed on training health professionals to work in tertiary care settings. Health professionals are more likely to seek employment in those institutions in which they were trained. In the short term, it is probably not feasible to have full-fledged postgraduate rotations in all regional centres. Nonetheless, every effort should be made to promote teaching in regional settings.

Attention also needs to be directed to the role of the Halifax hospitals in meeting the needs of the Metropolitan area. The primary purpose of internships and residencies is education, not the provision of service. The Royal Commission questions the necessity of assigning all beds in Halifax hospitals to teaching units. The implications of this for both patient access and quality of care must be closely evaluated.

5. Information in this section is based on a study by Case Mix Research, Queen's University, **Indirect Costs of Teaching in Nova Scotia Hospitals**, prepared for the Nova Scotia Royal Commission on Health Care. This study is published in Volume II of the Research Studies of the Royal Commission.

The Royal Commission, therefore, **RECOMMENDS:**

6.19 That the indirect costs of teaching be explicitly incorporated into the new hospital funding formula.

6.20 That the internship and practicum components of the education of health professionals be extended to the regions.

6.21 That the Provincial Health Council appoint a task force to make recommendations with respect to:

(a) an appropriate reduction in the number of beds in the Halifax hospitals reserved for teaching medical students; and

(b) the extension of hospital privileges to general practitioners in the community.

4. EDUCATION OF HEALTH CARE USERS AND PROVIDERS ON APPROPRIATE UTILIZATION

Health Care Users

A sound health strategy begins with the recognition of the right of the individual to live and work in a healthy environment and to have access to a comprehensive range of quality services. At the same time, these rights ought to be balanced with the responsibility of participating in the development and maintenance of a healthy environment, and of using valuable health care resources appropriately. **A health strategy must call upon the individual to exercise both rights and responsibilities**.

Without engaging in a "blame the victim" attitude, it is essential that individuals be encouraged to take greater responsibility for their health and well-being. There is clear evidence to link unhealthy lifestyles with certain forms of cancer, cardiovascular disease, and other illness and this fact must be impressed upon the public. Treatment of largely preventable diseases places great strain on health care dollars. A health care strategy must emphasize health promotion and disease prevention programmes which educate individuals in avoiding health hazards **under her or his control**.

At the same time, more information must be provided to Nova Scotians to increase awareness and understanding of how health care resources are being utilized and the implications of existing pressures on future resources. A reorientation of the current system away from its emphasis on illness treatment has been outlined in this Report. Health care consumers must be made aware of alternate health care options so that they can make informed decisions that could affect their health, the types of services available, as well as the "health" of the system as a whole.

The provision of universal health services under Medicare has led to the increased use of the health care system and a widespread expectation of entitlement to unlimited high quality, publicly-funded health care services. These high expectations put a continual demand on the health care system and on its resources. More appropriate use of health care resources can only be realized by changing the attitudes, expectations, and lifestyle of the public through an educational process.

In keeping with the Royal Commission's Guiding Principles, there is a need for a more active part to be played by the public in the planning of health care services generally, and in shaping the type of care available. A number of forums for public involvement have been suggested in this Report. Moreover, the public must be provided with information on its health status, and made aware of the inter-relation of key determinants of health such as poverty, environment, housing, nutrition, and regional disparities so as to promote more relevant policy decisions.

Thus, the Royal Commission **RECOMMENDS:**

6.22 That the Ministry of Health increase public education programmes to provide people with information on health status, healthy behaviour and lifestyles, and costs of health care, to encourage a sense of public stewardship of valuable health resources.

Health Care Providers

The Royal Commission recognizes the dilemma when health professionals are caught between a patient's rights and expectations of treatment, and the government's concerns to limit costs. The Royal Commission supports the principle of freedom of choice of the health care professional in serving the patient, and endorses his or her right to practice ethically and professionally. There is no doubt, however, that the control of access to health care services falls principally on the health professionals; it is thus imperative that they recognize the obligation to be cost-effective in the treatment of patients.

Accountability and coordination must be strengthened by providing health care professionals with opportunities to participate in the planning and management process of health care.

Financial incentives should be introduced by government to encourage sound management practices and decision-making by health professionals, and to encourage change in delivery and utilization patterns.

The Royal Commission, therefore, **RECOMMENDS:**

6.23 That the Ministry of Health devise educational strategies aimed at all health professionals to promote more efficient management of health care resources. Further, that health professional education incorporate a managerial component into all programmes.

Quality Assurance

To further increase accountability, review of physicians' practice patterns must be combined with quality assurance and risk management programmes so as to reduce potential for liability for institutional or medical malpractice. Liability insurance premium costs have been increasing over the past few years, largely in response to a perceived rise in the number and value of malpractice awards. This perception is in part the result of publicity from the United States spilling across the border. **It must be strongly stated that the medical liability situation in Canada is different, and that arguments about the number and value of malpractice awards must be set in the Canadian context.** The indirect cost of medical liability insurance to the health care system is the cost of "defensive medicine", i.e., procedures and tests done to limit legal liability rather than for necessary clinical purposes. The perception of physicians that there is a "crisis" may be more of a problem than the so-called crisis itself. Peer review and the development of clinical protocols would provide physicians with reference standards for everyday clinical practice.

As the Government of Nova Scotia has agreed in the recent contract with the Medical Society to pay $300,000 towards the liability insurance premium for the province's physicians, it is in the interest of government to ensure that quality assurance and risk management programmes for all health care facilities and homes for special care are developed. Furthermore, to involve the medical profession as a whole in reducing liability, the Royal Commission believes that it is essential to link hospital privileges and medical licensure to the ongoing review process of quality assurance and risk management. These programmes should incorporate continuing education, re-examination, and re-certification requirements.

It is therefore **RECOMMENDED:**

6.24 That the Ministry of Health require all health care institutions and homes for special care to implement quality assurance and risk management programmes.

Implementation Schedule — ChapterVI

		1990-91	1991-93	1993-96
6.01	▪ Re-examine the Established Programme Financing Act.	→	→	
6.02	▪ Urge the federal government to provide technical and advisory resources to allow coordination on issues of national importance.	→	→	→
6.03	▪ Strengthen financial management and accountability of the health care system.	→	→	→
6.04	▪ Consider health care spending in relation to other social and economic programmes which affect health care.	→	→	→
6.05	▪ Coordinate physician's fee negotiations with the provincial government's financial planning process.	→	→	→
6.06	▪ Establish a dedicated tax on alcohol and tobacco.	→	→	→
6.07	▪ Recover a more equitable share of tertiary care costs.	→	→	→
6.08	▪ Decentralize funding for health care to Regional Health Authorities.	→	→	→
6.09	▪ Establish population-based regional funding systems.	→	→	→
6.10	▪ Introduce three-year budget cycle.	→		
6.11	▪ Develop Regional Services Plan.	→	→	
6.12	▪ Develop incentives to promote alternate settings and payment for primary care.	→	→	→
6.13	▪ Expand the role of community hospitals as primary care facilities.	→	→	→
6.14	▪ Revise the hospital funding system.	→		
6.15	▪ Develop a model for funding hospitals on an output basis.	→	→	
6.16	▪ Accelerate the establishment of the Victoria General Hospital as an independent entity. Give independent status to the Nova Scotia Hospital.	→		

		1990-91	1991-93	1993-96
6.17	▪ Nomination procedures for boards of government-owned hospitals to be consistent with those at other hospitals in the province.	→		
6.18	▪ Freeze all capital construction, major equipment acquisition, and new programmes until Provincial Health Strategy and Regional Services Plans have been established.	→	→	
6.19	▪ Incorporate indirect costs of teaching into hospital funding formula.	→		
6.20	▪ Extend internship and practicum components of health education to the regions.	→	→	→
6.21	▪ Review number of Halifax hospital beds to be reserved for teaching and extension of hospital privileges to general practitioners.	→		
6.22	▪ Increase public education campaigns that provide information on health status, healthy behaviour, and lifestyles.	→	→	→
6.23	▪ Train health care professionals to manage health care resources more efficiently.	→	→	→
6.24	▪ Require all health care institutions and homes for special care to implement quality assurance and risk management programmes.	→	→	→

CHAPTER VII

CONCLUSION

On the basis of its comprehensive review of the health sector, The Nova Scotia Royal Commission on Health Care has proposed a **New Strategy** for the revitalization of health service delivery in this province. Since the inception of Medicare, the evolution of the health system has been oriented towards **one** component of health care, namely, the acute care institutional model. Without detracting from the past achievements of this approach, this continued emphasis has caused imbalances within the health care system. The reliance upon medical and institutional care is seriously constricting resources available for other, equally important aspects of health care, such as health promotion, disease prevention and community-based programmes. It has also hindered development of other forms of care in the full range of services that should be available to Nova Scotians, such as rehabilitative services, pastoral care, home care, and palliative care. The evolution and orientation of the health care system has **not** kept pace with the changing patterns of demand of Nova Scotians. The system has acquired a momentum of its own, impervious to the changing realities of society and to evolving demographic and morbidity patterns. **More attention needs to be paid to health outcomes**. This, together with constraints on the province's financial resources, is threatening the continued provision of appropriate quality health care services to Nova Scotians.

The Royal Commission maintains that the level of funding allocated to the health care system is fully adequate for meeting the needs of the population. However, the **allocation** of these resources must be reassessed and re-directed in a more responsive and balanced manner. It has become clear to the Royal Commission that the Government of Nova Scotia can provide appropriate and quality health services in a fiscally responsible manner **only by adopting fundamental structural and administrative reform.**

In this Report, the Royal Commission has proposed **Guiding Principles** as a basis for its **New Strategy for Health**. These principles should assist in a thorough re-thinking and re-design of a health system integrally grounded in the needs and aspirations of the people of Nova Scotia. The **New Strategy** establishes a new definition of health incorporating a comprehensive approach to health policy; structural and organizational changes involving broader levels of public participation; and extensive decentralization of the system which puts decisions closer to the consumer. These measures are designed to inject new vitality and vigour into a health system which has displayed symptoms of rigidity, inflexibility and an insufficient focus on outcomes.

The Royal Commission believes that a new strategy must address all the components in the health care system in an effort to revitalize health services. Policy and planning, human resource management, information systems, and the financial and budgetary process must form part of an integrated process and the basis of a renewed results-driven system, whose main objective is the **provision of quality and cost-effective health services to Nova Scotians.**

A blueprint for this health care system is presented in this Report. A complete list of the Royal Commission's recommendations follows. It is the Royal Commission's firm belief that by adopting the principles and measures proposed in this Report, the government and people of Nova Scotia will together fashion a truly comprehensive, responsive and efficient health care system, which will address their needs and those of generations to come.

RECOMMENDATIONS

A New Planning Dynamic

3.01 That the Government of Nova Scotia formally adopt a broad definition of, and commitment to, health based on the principles of a Comprehensive Health Policy.

3.02 That the Government of Nova Scotia, through the Provincial Health Council and Ministry of Health, develop Provincial Health Goals based on the principles of a Comprehensive Health Policy.

3.03 That the Ministry of Health disseminate, at periodic intervals, pertinent public information on health status and health surveys, so as to enable individuals and groups to make informed choices about health policies, programmes and options.

3.04 That the Government of Nova Scotia immediately appoint a Provincial Health Council, which will report to the Executive Council, and provide advice to the Minister of Health.

3.05 That the role of the Health Council be:

- (a) to advise government on a Provincial Health Policy and Goals;
- (b) to provide for broad involvement by the public in the development of a Comprehensive Health Policy; and
- (c) to monitor, assess, and report on the performance of the health system.

3.06 That the Health Council immediately initiate a participatory process to develop Provincial Health Goals, which will form the basis for the province's Strategic Plan and all health service programmes.

3.07 That the Government of Nova Scotia merge the Department of Health and Fitness, the Health Services and Insurance Commission, and the Commission on Drug Dependency into an integrated "Ministry of Health".

3.08 That the Government of Nova Scotia transfer to the Ministry responsibility for the policy, analysis and research functions presently carried out by Maritime Medical Care Incorporated for Medical Services Insurance programmes, alter the contract with Maritime Medical Care Incorporated accordingly, and amend the legislation to remove specific reference to Maritime Medical Care Incorporated.

3.09 That the Government of Nova Scotia and Dalhousie University jointly establish, under the aegis of the Faculty of Health Professions, a Health Policy and Management Research Centre to undertake, on a contractual basis, health surveys, evaluations, research projects, and planning studies. The other Atlantic provinces should be invited to join in establishing and funding this centre.

3.10 That the Ministry of Health improve and update its information systems so as to provide a solid foundation on which to base policy development, comparative studies and evaluations.

3.11 That the Government of Nova Scotia emphasize human resource development. That it undertake a review of compensation policies for senior and middle management to ensure Nova Scotia can attract and retain the best possible health administrators.

3.12 That professional training and continuing education be provided so as to reorient Ministry of Health personnel to health promotion and community development.

3.13 That the Health Council immediately appoint a task force to define new health regions for Nova Scotia, and report with its recommendations within two months of its appointment.

3.14 That the Government of Nova Scotia establish a Regional Health Authority for each of the regions defined by the task force of the Health Council, and appoint the boards of these Regional Health Authorities based on a public nomination process defined in consultation with the Provincial Health Council.

3.15 That the Ministry of Health immediately begin the administration of health programmes on the basis of these new regions by transferring to the Regional Health Authorities financial resources for the management of all health care services.

3.16 That, upon establishment of the new regions, the Ministry of Health provide each Regional Health Authority with the resources to hire a Chief Executive Officer and staff, and initiate delegation of the responsibility for the planning and management of all health programmes to these Regional Health Authorities.

3.17 That the Regional Health Authorities immediately initiate local needs assessments as a basis for the development of Regional Services Plans.

3.18 That the Ministry of Health establish a Regional Team within the Ministry to facilitate and support the development of Regional Health Authorities during a transition period of up to a maximum of five years.

3.19 That the Ministry of Health realign and reorganize all departmental information bases, including physician utilization and payment information, to conform with the new regions.

3.20 That the Ministry of Health support the establishment of the management information systems needed by the Regional Health Authorities for regional planning, including workload measurement systems for nursing and the associate health professions.

3.21 That the Government of Nova Scotia immediately establish, under the aegis of the Cabinet Secretariat, a committee to strengthen inter-departmental coordination on health-related issues at the senior government level. This committee should consist of relevant ministers, deputy ministers and supporting resources.

3.22 That the Province of Nova Scotia act jointly with the Provinces of New Brunswick and Prince Edward Island to create a Martime Provinces' Health Secretariat to coordinate policy and health initiatives for the Maritimes, with the Province of Newfoundland consulted as appropriate.

3.23 That the Province of Nova Scotia participate in and financially support the formation of a national agency which would coordinate and cooperatively pursue health technology evaluation and research.

3.24 That the Province of Nova Scotia request Dalhousie University, in cooperation with the Council of Maritime Premiers, to appoint a task force with the mission to develop the precise representation and specific terms of reference for the establishment of a Health Faculties Board within the organizational framework of the University.

Health Professions

4.01 That the Ministry of Health in consultation with the Health Council develop a comprehensive health human resources plan based on health needs of the population and a review of the present and future roles of all health professionals to determine appropriate entry points to the health system, numbers, mix, training, scope of practice and distribution of health professionals in Nova Scotia.

4.02 That new modes of delivery for the services of all health professionals be explored, including expansion of the roles of the professions and entry points to the health system, non-institutionally based delivery of care, and shared service models to achieve a cost-effective mix of health personnel. That appropriate legislation be enacted to allow flexibility in the delivery of specific health services by all the various health professions.

4.03 That the Ministry of Health place the utmost priority on the planning of nursing human resources. Further, that the coordination of nursing human resources planning be ensured through the development of a comprehensive information base at the provincial and institutional levels.

4.04 That the Provincial Health Council evaluate the role of the Certified Nursing Assistant.

4.05 That the Provincial Health Council oversee the development and implementation of the following measures with respect to nurses:

- **(a) Job enhancement initiatives to be funded by the Ministry of Health.**
- **(b) Organizational structures providing unit managers with the authority to allocate human and financial resources, and that encourage participatory management on a unit and facility-wide level.**
- **(c) Options allowing for greater flexibility and individual control over scheduling, such as "flex" time, job sharing, leaves of absences, extended parental and educational leaves and deferred salary leaves.**
- **(d) Guidelines for a clinical ladder structure as the basis for a salary grid that provides finacial compensation consistent with clinical expertise, levels of responsibility and variations in work conditions.**
- **(e) Impact analysis of all new programmes and services to assess increased demands on nursing services and the commensurate financial implications.**

4.06 That the Provincial Health Council initiate a demonstration project in a health institution based upon the principles of participatory management and a collaborative team approach to the delivery of patient care. Participants on this project should include representatives from the unions representing nurses, employers, university nursing programmes, the Registered Nurses Association of Nova Scotia, staff physicians and staff nurses, who will be responsible for the design and implementation plan. This demonstration project, which should operate approximately 18 months, should be evaluated every six months.

4.07 That the Provincial Health Council make recommendations on the following areas within a six month time frame:

(a) Implications of entry requirements to practice for nurses.

(b) Definition of career and remuneration structures within Nursing that recognize and compensate for expertise in administration, teaching, research and clinical practice.

(c) Accessibility and financial support for continuing education through distance learning, university, and institutional programmes.

4.08 That the Ministry of Health budgetary guidelines for hospital staffing be updated to provide funding for inservice programmes, orientation, vacations, educational leaves and staff replacement time; that hospital funds be designated for continuing education; and that specific programmes be developed to strengthen management skills of nurses.

4.09 That the policy and administrative framework for an expanded role for nursing in the delivery of primary health care in Nova Scotia be established. That this process involve collaboration of nurses and other health professionals, administrators, government and educational institutions.

4.10 That the Provincial Health Council develop an interdisciplinary demonstration project which expands the role of nurses to provide primary health care in a community setting, with delivery of services based on a team approach; and that an 18-month time frame be set, with ongoing evaluation.

4.11 That in view of the projections of increased physician human resources and their implications on medical services insurance expenditures, the Ministry of Health place the utmost priority on physician human resources planning strategies, working in consultation with key groups.

4.12 That the Ministry of Health, in keeping with the recommendations of the physician human resources management strategy, establish targets for physician numbers, in total and specialty, commensurate with the Provincial Health Strategy. That the necessary measures required to achieve these targets, including reductions in enrolment and immigration, be immediately implemented.

4.13 That the Ministry of Health determine regional requirements for physicians, including appropriate mix of specialties, in keeping with the principle of regionally-based planning. This regional planning will be based on demography and health status indicators, within provincially-established guidelines.

4.14 That, given the national market for physicians, and the large annual interprovincial flows of physicians, the Ministry of Health continue to work towards a federal-provincial agreement to bring about a general reduction in the rate of growth of numbers of physicians in Canada.

4.15 That the Government of Nova Scotia work towards a reduction in total undergraduate medical school enrolment in Canada of 25 per cent. Further, that the Dalhousie Faculty of Medicine share the national burden of reduction on a proportional basis, taking into consideration its recent enrolment reductions. That alternate funding mechanisms for the Dalhousie University Faculty of Medicine, other than the per capita formula, be developed.

4.16 That medical staffs of community, regional and tertiary care hospitals be established at a level appropriate to the service roles established in the Regional Services Plans.

4.17 That any growth in the institution's medical staff be based on Regional Services Plans and regional human resources planning, be subject to impact analysis, and receive both Regional Health Authority and Ministry of Health approval.

4.18 That so as to regulate the supply and geographic distribution of physicians, the government of Nova Scotia immediately take steps to restrict new Medical Services Insurance billing numbers issued to physicians performing insured services in this province.

4.19 That the Government of Nova Scotia introduce a mixed system of remuneration for physicians, including fee-for-service, salary and capitation methods of payment.

4.20 That the Government of Nova Scotia develop the administrative framework and establish alternate settings for the practice of medicine, such as health service organizations and community health centres.

4.21 That a task force of the Provincial Health Council be established to undertake a comprehensive review of the fee-for-service schedule. This review will seek ways to adjust the schedule to support health maintenance, health promotion and illness prevention.

4.22 That the Government of Nova Scotia establish payment to full-time institutionally-based physicians, namely pathologists, radiologists, and anesthesiologists, on a salary or sessional fee basis.

4.23 That the Government of Nova Scotia adopt a managed growth strategy, with well-defined objectives, in order to achieve an orderly growth of provincial expenditures for physicians' services.

4.24 That the Ministry of Health establish the administrative structure for a prospective capitation payment system for physicians' services based on the defined regions, prior to entering another round of negotiations.

4.25 That the Ministry of Health establish a Clinical Services Fund to be administered by the proposed Health Faculties Board as the basis for block funding the patient care services provided by full-time teaching physicians, so as to allow for better management of physician supply and public expenditures.

4.26 That clinical heads within institutions be provided with financial incentives for their administrative and managerial responsibilities, and that physicians be encouraged and provided with appropriate incentives to manage health care resources efficiently.

4.27 That the Government of Nova Scotia, in conjunction with the other Atlantic provinces and the universities involved, establish enrolment targets that recognize demonstrated regional needs, as well as national and international interest in educational programmes for the associate health professions.

4.28 That the Government of Nova Scotia develop training programmes for, and expand the use of, auxiliary personnel for rehabilitation services such as physiotherapy and occupational therapy. Specific training requirements, service functions, and supervisory conditions must be determined as preliminary steps.

4.29 That the Ministry of Health review and plan for an appropriate supply of the associate health professions; that salary scales be examined and revised, and career structures created for the associate health professions, so as to reflect seniority, responsibility, and educational attainment.

4.30 That worklife conditions of the associate health professionals be addressed in order to reduce the loss of professionals through attrition, inactivity, and job dissatisfaction through the provision of options allowing for greater flexibility, such as "flex" time, job sharing, leaves of absences, extended parental and education leaves, and deferred salary leaves.

4.31 That workload measurement systems be established so as to ensure appropriate staffing levels for the associate health professions.

Revitalized Services

5.01 That the Ministry of Health reallocate non-transferable resources to foster the development of health promotion and community programmes based on a Comprehensive Health Policy:

(a) That community health programmes receive an increased budget allocation equal to one per cent of the budget of the Ministry of Health in each of the next five years; and that this reallocation take place in a planned manner, allowing for the development of the administrative capacity to implement such programmes.

(b) That the Ministry of Health establish a Community Health Initiatives Fund in support of health promotion and illness prevention projects at the community level. This fund, to be regionally administered, will consist of $1 per capita per annum and have a five year life span.

5.02 That the following steps with respect to the Coordinated Home Care Programme be taken:

(a) development of an evaluation process which includes measurement of programme effectiveness;

(b) a review of the human and fiscal resources allocated to the Department of Community Services and the Ministry of Health for Coordinated Home Care;

(c) the expansion of target groups and eligibility criteria to address acute health care needs of all age groups, including the terminally ill; and

(d) coordination of Home Care with acute and chronic institutional services, including early discharge programmes.

5.03 That the guidelines established by the Canadian Council on Hospital Accreditation with respect to pastoral care services be met by all hospitals in Nova Scotia; that provision for appropriate clinical pastoral care be made through regionally-administered health services budgets; finally, that human resource planning and management be done in collaboration with the Institute for Pastoral Training.

5.04 That a review be undertaken by the Ministry of Health and the Provincial Health Council to ensure the completeness of rehabilitation services in the institutional, community, and home settings.

5.05 That palliative care programmes be recognized as integral components of health services at the tertiary, regional and community levels; that upon assessment and admission to a palliative care programme, an individual be eligible for all required medication, supplies, and services as a part of the insured health services in any institutional, community, or home setting approved by a physician.

5.06 That the range of services for mental health provided by the Ministry of Health be significantly broadened beyond the institutional services which presently dominate the mental health budget; and that additional administrative and staffing resources be provided to support this expansion.

5.07 That the name of the Psychiatric Mental Health Division be changed to Mental Health Division to emphasize this new, broadened focus.

5.08 That the Ministry of Health conduct a major evaluation of psychiatric outpatient services provided by hospitals and mental health centres.

5.09 That until such time as there are sufficient Canadian-trained psychiatrists, the Ministry of Health make a concerted effort to recruit American-trained psychiatrists and respond immediately to the manpower requirements in child psychiatry.

5.10 That the Ministry of Health allocate resources for improved facilities, new locations and a more supportive environment for drug and alcohol rehabilitation programmes, so as to enhance programme delivery and reduce barriers to programme entry.

5.11 That all hospital-based drug and alcohol rehabilitation programmes be structured so as to maximize federal contributions from sources such as the Vocational Rehabilitation for Disabled Persons Agreement.

5.12 That drug utilization reviews be expanded in order to reduce overmedication and that better information and drug education be provided to physicians.

5.13 That the Ministry of Health eliminate the actual acquisition cost method of payment, and mandate a lowest-available price-product system for the Pharmacare Programme.

5.14 That a public information and consumer awareness campaign be implemented to increase knowledge regarding prescription and over-the-counter drugs, particularly with respect to their side-effects, interactions, and reactions, as well as substitutes and cost.

5.15 That the Ministry of Health develop a patient card computer-linked system to monitor drug utilization, cost, and increase efficiency of the claims processing and accounting functions.

5.16 That the Pharmacare Programme coverage be uniformly extended to Nova Scotians on social assistance and that criteria be developed for further expansion of the programme to Nova Scotians confronted with "catastrophic" drug costs.

5.17 That the Provincial Health Council provide advice on emergency medical services, including operational standards for ambulances, training and certification of attendants, guidelines for use of emergency and non-emergency patient transfer, and equipment.

5.18 That standardized programmes of training for Emergency Medical Attendants which meet the accreditation standards of the Canadian Medical Association be developed immediately and phased-in to apply to existing and future ambulance attendants within two years.

5.19 That greater efficiencies and better management of utilization be achieved by eliminating duplicate areas of service by private operators; by provincially coordinating transfers between institutions; and by establishing a hospital "shuttle" system for transferring patients in urban areas.

5.20 That an appropriate information system be developed and implemented to improve the ability to manage ambulance services.

5.21 That a comprehensive review and evaluation of ambulance services be conducted in two years by the Health Council, so as to examine progress made, and to recommend possible future changes to the delivery system.

5.22 That a standing committee of the Health Council collect, analyze, and disseminate information on the appropriate use and types of health technology to be available as insured services in the province. Furthermore, that the Ministry of Health rationalize the use of technology based on these evaluations.

5.23 That the Ministry of Health not provide payment to hospitals or physicians for services using unapproved technology.

5.24 That clinical guidelines and protocols for the use of specific health technologies be developed by the Health Council.

Financing the Health Care System

6.01 That the Government of Nova Scotia join with the other provinces and urge the federal government to re-examine the Established Programme Financing Act so as to achieve a clearer policy and financing framework. That the Government of Nova Scotia, together with the other provinces, urge the federal government to reassess the impact of its decreasing share of provincial health care expenditures and review the consequent implications for maintaining the integrity of the Canada Health Act.

6.02 While the future of the Established Programme Financing Act is being reassessed, that the Government of Nova Scotia, together with the other provinces, request that the federal government provide technical and advisory resources in areas of inter-provincial scope, such as physician human resources planning and technology assessment, to allow for coordination on issues of national importance.

6.03 That effective planning, financial management, and accountability be strengthened in view of projected demands on the health care system and of the provincial economic climate. That targeted levels of health spending be established globally and for individual programmes within the health budget.

6.04 That government approach expenditures on health care strategically, and weigh health spending in relation to other social and economic programmes which have an impact on health status.

6.05 That fee negotiations with physicians be coordinated with the provincial government financial planning process. That officials from Management Board and the Department of Finance form part of the government's negotiating team.

6.06 That the Government of Nova Scotia establish a dedicated tax on alcohol and tobacco with revenues designated specifically to drug and alcohol rehabilitation programmes.

6.07 That the Ministry of Health recover a more equitable share of costs for tertiary care services from the other Maritime provinces.

6.08 That the Government of Nova Scotia decentralize the funding structure for health care expenditures to the Regional Health Authorities.

6.09 That the Ministry of Health establish appropriate information and financial management systems to allow for a population-based regional funding system.

6.10 That a three-year budget cycle be introduced into the health care financial management system to enable effective long-term planning of health programmes.

6.11 That each Regional Health Authority develop its Regional Services Plan, which will define the role and function of all institutions within its region.

6.12 That the Ministry of Health develop incentives to promote alternative settings and payment for primary care services provided by physicians and other front-line health professionals, such as community health centres and health service organizations.

6.13 That the Regional Health Authorities consider the expansion of the roles of Community Hospitals as primary care facilities.

6.14 That a task force of the Provincial Health Council, composed of representatives from the Ministry of Health, the Nova Scotia Association of Hospital Organizations, and each Regional Health Authority, be established to recommend revisions to the hospital funding system, taking into account the principles outlined above.

6.15 That the Ministry of Health participate in inter-provincial studies to develop a model for funding hospitals on an output basis.

6.16 That the establishment of the Victoria General Hospital as a distinct, independent organization, subject to the same rules and regulations as other hospitals in the province, be accelerated and that the Nova Scotia Hospital be similarly established.

6.17 That all government-owned hospitals employ nominating procedures for the appointment of directors that are similar to and consistent with the procedures in use at the other hospitals in the province.

6.18 That the Hospital Construction Programme and Committee be disbanded and that a freeze be established on all capital construction, major capital equipment acquisitions, and new programmes until the Provincial Health Strategy and Regional Services Plans have been established.

6.19 That the indirect costs of teaching be explicitly incorporated into the new hospital funding formula.

6.20 That the internship and practicum components of the education of health professionals be extended to the regions.

6.21 That the Provincial Health Council appoint a task force to make recommendations with respect to:

(a) an appropriate reduction in the number of beds in the Halifax hospitals reserved for teaching medical students; and

(b) the extension of hospital privileges to general practitioners in the community.

6.22 That the Ministry of Health increase public education programmes to provide people with information on health status, healthy behaviour, and lifestyles, and costs of health care, to encourage a sense of public stewardship of valuable health resources.

6.23 That the Ministry of Health devise educational strategies aimed at all health professionals to promote more efficient management of health care resources. Further, that health professional education incorporate a managerial component into all programmes.

6.24 That the Ministry of Health require all health care institutions and homes for special care to implement quality assurance and risk management programmes.

APPENDIX A

Province of Nova Scotia

(Signed) Alan R. Abraham

By His Honour
The Honourable Alan R. Abraham, C.D.
Lieutenant Governor of Nova Scotia

To:
J. Camille Gallant, of Halifax,
in the County of Halifax

Edward M. MacNeil, of Sydney River,
in the County of Cape Breton

The Right Reverend G. Russell Hatton, of Halifax,
in the County of Halifax

Sharon Marshall, of Kentville,
in the County of Kings

Dr. Earle Reid, of Halifax,
in the County of Halifax

GREETINGS:

WHEREAS it is deemed expedient to cause inquiry to be made into and concerning the public matters hereinafter mentioned in relation to which the Legislature of Nova Scotia may make laws;

AND WHEREAS the maintenance and improvement of public health is of profound importance to the people of Nova Scotia;

AND WHEREAS it is desirable to assess the costs of providing present health care services and to make recommendations respecting measures which might be taken to achieve greater efficiency in delivery of health care services;

NOW KNOW YE THAT I have thought fit, by and with the advice of the Executive Council of Nova Scotia, to appoint, and do hereby appoint you, J. Camille Gallant, Edward M. MacNeil, The Right Reverend G. Russell Hatton, Sharon Marshall and Dr. Earle Reid to be during pleasure Our Commissioners under the Public Inquiries Act, the first named to be Chairman thereof, to inquire into and make recommendations to the Governor in Council with respect to health care, and without limiting the generality of the foregoing, to:

(a) examine present costs of the health care delivery system, and recommend efficiencies which may be adopted to reduce costs while maintaining the effectiveness of the present programmes without imposing hospital user fees or direct charges for physicians' services;

(b) examine the rates of increase in the cost of health care, including hospital care, medical services insurance, ambulance services, community health and drug dependency programmes, and to the extent possible identify the reasons for such increases;

(c) examine duplication of services and recommend methods to improve efficiency;

(d) assess the present and future physician manpower requirements of the Province;

(e) assess administrative efficiencies of hospitals and make recommendations respecting alternative practices which would permit optimum efficiency in the hospitals and hospital system of the Province; and

(f) assess the costs incurred by teaching hospitals in respect of their responsibilities to medical schools and students;

2. Direct the said Commissioners to report the evidence and findings of such inquiry to the Executive Council and make recommendations thereon;

3. Appoint George White of Truro, in the County of Colchester, as Secretary and Legal Counsel to the Commission;

4. Subject to the prior approval of Management Board and upon such terms and conditions as Management Board may approve, direct the said Commissioners to retain the services of such technical, clerical and other personnel, as are required for the purpose of the inquiry;

5. Authorize payment to the Commissioners, Secretary and other personnel required in the work of the Commissioners, for necessary disbursements, travel and reasonable living expenses as are required in the discharge of their duties, such payments to be made in such amounts and upon such conditions as are approved for public servants, or by Management Board from time to time;

6. Order that the remuneration, costs and expenses payable or incurred in the course of the inquiry shall be paid out of the Consolidated Fund of the Province.

GIVEN under my Hand and Seal at Arms at the City of Halifax this 25th day of August in the year of Our Lord one thousand nine hundred and eighty-seven and in the thirty-sixth year of Her Majesty's reign.

(Signed) Terence R.B. Donahoe PROVINCIAL SECRETARY

APPENDIX B

Royal Commission Secretariat

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	Susanna B. Janowitz, M.H.S.A.
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Administrative Assistant	**Nina Byford**
Project Controller	**Fred Carey**
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APPENDIX D

Glossary of Terms

Acute Care—Care or treatment for illness of short duration or sudden onset, requiring concentrated medical and nursing attention.

Ambulatory Care—Health care services rendered to patients who are not confined to an institutional bed as inpatients during the time that the services are rendered.

Associate Health Professionals—Persons with special training in fields related to medicine, such as physiotherapy, occupational therapy, audiology, and medical social workers. Associate health professionals work with physicians and other health professionals.

Auxiliary Personnel—Health workers providing support to the health professionals.

Capitation Funding—Funding of primary care through a monthly dollar amount for each eligible insured person enroled in a health service organization. The amount depends on the range of physician services provided in the organization.

Case-mix—The diagnosis-specific makeup of a health programme's workload. Case-mix directly influences the length of stay, intensity, cost and scope of the services provided by a hospital or other health programme.

Cerebrovascular Disease—Any disorder of the blood vessels of the brain and its covering membranes.

Chronic Care—Care provided for long-lasting or long-term illness or disability (either physical or mental).

Community Development—Involves the facilitation, direction, and fostering of processes of social change in the direction of greater well-being for the individuals of a community.

Community Health Centre (CHC)—A health organization providing primary health and other supportive care to a neighborhood or community under a global budget form of payment rather than fee-for-service or capitation.

Congenital Anomalies—Includes all disorders present at birth whether they are inherited or caused by an environmental factor.

Commission on Drug Dependency (CODD)—The provincial agency responsible to develop and operate programmes dealing with or related to drug dependency.

Demography—The statistical study of human populations especially with reference to size and density, distribution, and vital statistics.

Diagnostic Related Grouping (DRG)—A patient classification system that relates demographic, diagnostic, and therapeutic characteristics of patients to length of inpatient stay and amount of resources consumed.

Disability—A condition that renders a person incapable of performing one or more activities of his or her daily life or occupation. Any limitation of an individual's physical, mental or social activity.

Entry to Practice—The minimum qualification required for certification, licensure, or registration as a beginning practitioner.

Epidemiology—The study of determinants of health and disease in human populations; it includes the study of incidence, distribution, and control of disease in a population.

Extended Care—That care required by a person with a relatively stabilized chronic disease or functional disability, who, having reached the apparent limit of recovery, and who has relatively little need for the diagnostic and therapeutic services of a hospital but who requires availability of personal care on a continuing 24-hour basis, with medical and professional nursing supervision. This care is usually required for a period of months or years.

Fee-For-Service Payment—The predominant form of physician reimbursement under the Medical Services Insurance Plan (MSI), through which a physician is paid a certain amount per procedure or service performed according to a schedule of fees.

Full-time Equivalent (FTE)—Personnel may be engaged on a full-time or a part-time basis. To provide a common base for comparative purposes, various methods are used to equate a certain number of part-time positions to one full-time equivalent position.

Geographic Full-Time (GFT) Clinical Faculty Member—A clinical teacher/investigator with a joint university/teaching hospital appointment, working in a clinical teaching unit and devoting not less than 50% of his/her full-time to university activities including teaching, research and administrative duties. The GFT faculty member has a joint contract with the university/teaching hospital under which his/her personal income is paid.

Global Budgeting—An arrangement whereby an annual all-inclusive sum is allocated to an organization by a funding agency for all the services provided.

Health Care—Those services provided to individuals or communities through health organizations or professions. The aim of health care is to promote, maintain, restore, and monitor health. It is not limited to medical care provided by physicians, but includes many professions.

Health Promotion—The process of enabling people to increase control over and improve their health. It involves the population as a whole in the context of their everyday lives, rather than focusing on people at risk for specific diseases and is directed toward action on the causes of illness.

Health Services and Insurance Commission (HSIC)—The provincial agency responsible for providing a range of non-hospital medical services, which include physician services, dental services for children, prescription drug services for seniors, optometric services, and prosthetic services.

Health Status Indicator—A measurable variable that reflects the state of health of persons in a community. Examples include infant mortality rates, disability days, etc.

Health Maintenance Organization (HMO)—An organized system for providing comprehensive, prepaid health care in the U.S. HMOs provide physicians' services, hospital care and other health maintenance services to an enroled group of persons. Reimbursement is on the basis of a predetermined per capita amount, regardless of the amount of actual service provided.

Health Service Organization (HSO)—A health organization in Ontario that provides primary care delivered through organizations ranging from physician partnerships to large group practices, where funding is provided on a capitation basis for specified contracted health services to a rostered population.

Home Care—Health services provided in the homes of the elderly, disabled, sick or convalescent. Such services can include nursing care, social services, homemaker services, or rehabilitation services.

Information System—The combination of vital and health statistical data from multiple sources, used to derive information about health needs, health resources, costs, use of health services, and outcomes of use by the population.

Life Expectancy—A statistical projection of the number of years an individual is expected to live. Life expectancy can be calculated from birth or from some other age.

Lifestyle behaviours—The set of habits and customs of individuals (for instance, use of substances such as alcohol, tobacco, caffeine; dietary habits; exercise) that have important implications for health.

Medical Services Insurance (MSI)—The provincial medical care insurance programme administered by Maritime Medical Care (MMC) on behalf of HS&IC.

Morbidity—The extent of illness, injury or disability in a defined population, usually expressed as a general or specific rate of incidence or prevalence.

Mortality—The relation between deaths and the population in which they occur. The mortality rate (death rate) expresses the number of deaths in a given population within a prescribed time. It may be expressed as death rates for specific diseases and ages, sexes, or other attributes.

Nurse Practitioner—A registered nurse who has completed an advanced, formal programme of study in providing primary health care through diagnosis, treatment, and care of the patient. Nurse practitioners generally function under the supervision of a physician, but not necessarily in his or her physical presence.

Occupational Therapy—A method of rehabilitation that seeks to restore, develop, or maintain the task performance skills of persons physically or mentally impaired. Such activities are intended to help patients return to everyday life.

Palliative Care—Involves active compassionate therapy for patients with terminal illness. The aim is to provide a pain free but alert condition, as well as social, psychological and spiritual support for patient and family.

Physiotherapy—A method of treating disease or impaired motion through physical methods such as exercise, heat massage, hydrotherapy, or mechanical devices.

Potential Years of Life Lost (PYLL)—A measure of relative impact of various diseases and lethal forces on society. PYLL highlights the loss to society as a result of early deaths due to specific causes, and is the sum, over all persons dying from that cause, of the years that these persons would have lived had they experienced normal life spans.

Practice Plan—The contractual agreement between a group of physicians for the method of distribution of the group's practice earnings.

Practice Profile—An analysis of a physician's fees by procedure, for the purpose of examining reimbursement or practice patterns.

Prevention of Illness—The protection of health by personal or community-wide efforts, including the preservation of good nutritional status, physical fitness, emotional well-being, immunization, and a safe environment.

Primary Care Services—Primary health care services include not only those services that are provided at first contact between the patient and the health professional, but also health promotion and maintenance of health and complete and continuous care for the individual, including referral when required.

Prospective Payment—A method of payment to health organizations whereby rates of payment to health care providers for services to patients are established in advance for a fiscal year, and providers are paid these rates for services delivered regardless of the costs actually incurred.

Rehabilitation Therapy—Therapy aimed at restoring or maintaining greatest possible function and independence. Such therapy is especially useful to persons after suffering injury or disease by helping recover maximum use of the affected areas of the body.

Respite Care—Patient care provided intermittently in the home or institution in order to provide temporary relief to the family who is providing continuous care to the patient in the home.

Risk Factor—An aspect of personal behaviour or lifestyle, an environmental exposure, or an inborn or inherited characteristic, which on the basis of epidemiological evidence, is known to be associated with health-related conditions considered important to prevent.

Secondary Care Services—The level of medical care requiring consultation or management by specialists such as general internists, general surgeons, pediatricians, psychiatrists, etc., to whom primary care physicians refer patients.

Self help, self care—A concept of health care stressing that individuals can manage many of their own health problems when given sufficient information and instruction.

Standardized Mortality Rate—A ratio which expresses the number of observed deaths in a defined area for a defined period compared to those expected if the rates of a reference population (such as an entire province) applied in the area concerned.

Teaching Hospital—A hospital formally affiliated with a university for the purpose of providing clinical medical education and research.

Tertiary Care Services—Services usually only accessible through referral from a primary or specialized medical practitioner involving the application of highly specialized knowledge or equipment. Usually provided on a regional or provincial basis for unusually complicated or extremely ill patients who cannot be cared for at the primary or secondary levels of care.

Utilization—The use, patterns of use or rates of use of health care services by a population, such as hospital care, physician visits, or prescription drugs.

Vocational Rehabilitation of Disabled Persons (VRDP)—A Health and Welfare Canada agreement with all provinces (except Québec) to provide for cost sharing of provincial programmes for the vocational rehabilitation of physically and mentally disabled persons.

Workload Measurement—A system of evaluating workload by using standard measures or units of service to determine the manpower, supplies, and equipment utilized in the production of a specific outcome.

APPENDIX E

Research Studies

VOLUME I

Institute for Health Care Facilities of the Future:

Inter-provincial Comparison of Health Care Expenditures

Health Status Indicators and Demographic Trends for Nova Scotia

Fiscal Federalism from the Perspective of Nova Scotia

VOLUME II

Canmac Economics Ltd.:

Economic Forecast

Gardner Pinfold Consulting Economists Limited:

The Economic Impact of Public Expenditures on Health Care in Nova Scotia

Case Mix Research:

Indirect Costs of Teaching in Nova Scotia Hospitals

Nova Scotia Working Party on Physician Manpower Planning:

Physicians in Nova Scotia: A Human Resource Management Strategy

VOLUME III

Stevenson Kellogg Ernst & Whinney:

Review of Relationship Between the Nova Scotia Health Services and Insurance Commission and Maritime Medical Care Inc.

Practice Plans at Dalhousie University Faculty of Medicine

Doane Raymond:

Comprehensive Health Care Planning Guidelines

MacLean Hospitality Consultants Ltd.:

Report on Cost and Quality of Hospital Food Production in Nova Scotia